



Full wwPDB X-ray Structure Validation Report ⓘ

Nov 7, 2023 – 05:48 PM EST

PDB ID : 8FC1
Title : Crystal structure of the *Thermus thermophilus* 70S ribosome in complex with protein Y, hygromycin A, and erythromycin at 2.50Å resolution
Authors : Chen, C.-W.; Syroegin, E.A.; Svetlov, M.S.; Polikanov, Y.S.
Deposited on : 2022-12-01
Resolution : 2.50 Å (reported)

This is a Full wwPDB X-ray Structure Validation Report for a publicly released PDB entry.

We welcome your comments at validation@mail.wwpdb.org

A user guide is available at

<https://www.wwpdb.org/validation/2017/XrayValidationReportHelp>

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

<http://www.wwpdb.org/validation/2017/FAQs#types>.

The following versions of software and data (see [references ⓘ](#)) were used in the production of this report:

MolProbity : 4.02b-467
Mogul : 1.8.5 (274361), CSD as541be (2020)
Xtriage (Phenix) : 1.13
EDS : 2.36
buster-report : 1.1.7 (2018)
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac : 5.8.0158
CCP4 : 7.0.044 (Gargrove)
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.36

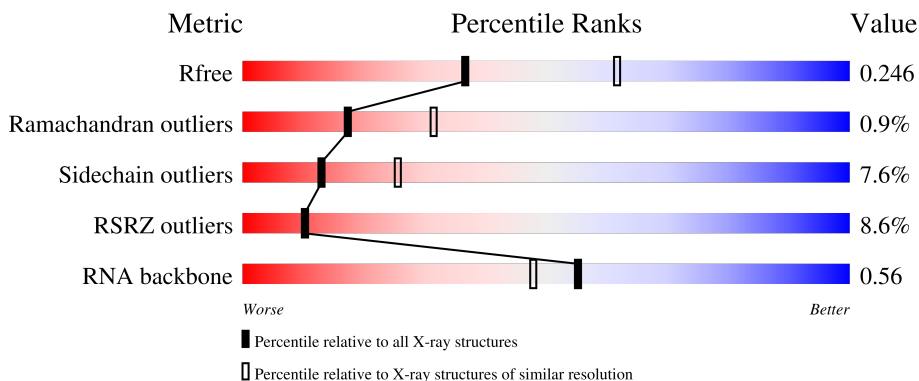
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 2.50 Å.

Percentile scores (ranging between 0-100) for global validation metrics of the entry are shown in the following graphic. The table shows the number of entries on which the scores are based.



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	130704	4661 (2.50-2.50)
Ramachandran outliers	138981	5231 (2.50-2.50)
Sidechain outliers	138945	5233 (2.50-2.50)
RSRZ outliers	127900	4559 (2.50-2.50)
RNA backbone	3102	1008 (2.84-2.16)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments of the lower bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions $\leq 5\%$. The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density. The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	1A	2915	 3% 82% 15% ..
1	2A	2915	 4% 81% 17% ..
2	1B	121	 87% 12% .
2	2B	121	 7% 85% 14% .
3	1D	276	 2% 93% 7%

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Mol	Chain	Length	Quality of chain
3	2D	276	9% 95% 5%
4	1E	206	2% 94% 5%
4	2E	206	6% 93% 6%
5	1F	210	89% 8%
5	2F	210	2% 87% 10%
6	1G	182	2% 92% 8%
6	2G	182	61% 91% 8%
7	1H	180	% 92% 5%
7	2H	180	24% 87% 9%
8	1I	148	2% 91% 9%
8	2I	148	14% 93% 6%
9	1N	140	% 93% 7%
9	2N	140	7% 94% 6%
10	1O	122	3% 98%
10	2O	122	2% 98%
11	1P	150	% 96%
11	2P	150	6% 95%
12	1Q	141	3% 96%
12	2Q	141	11% 91% 9%
13	1R	118	% 93% 7%
13	2R	118	4% 95% 5%
14	1S	112	% 92% 5%
14	2S	112	21% 88% 10%
15	1T	146	% 82% 8% 10%
15	2T	146	5% 85% 5% 10%




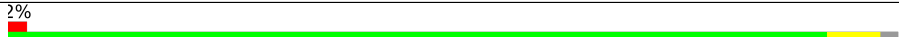
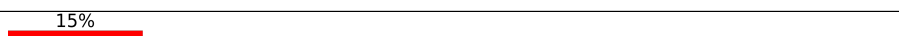
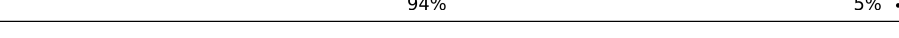
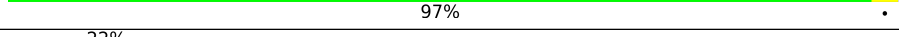
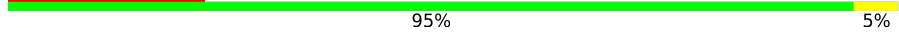



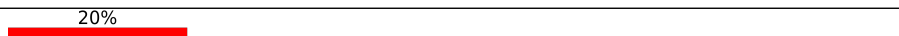

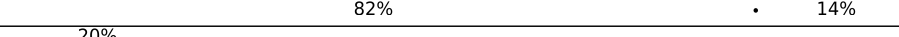

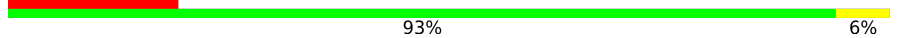



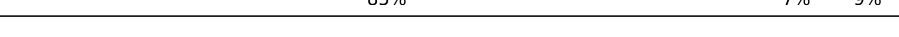
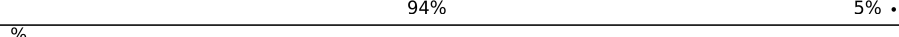
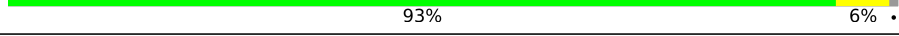
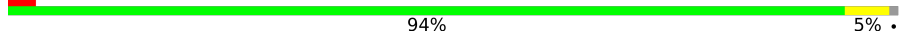


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Mol	Chain	Length	Quality of chain
16	1U	118	93% 5%
16	2U	118	94% 5%
17	1V	101	94% 5%
17	2V	101	94% 5%
18	1W	113	94% 5%
18	2W	113	90% 9%
19	1X	96	95% 5%
19	2X	96	94% 5%
20	1Y	110	93% 5%
20	2Y	110	91% 6%
21	1Z	206	91% 7%
21	2Z	206	92% 6%
22	10	85	88% 9%
22	20	85	86% 5% 9%
23	11	98	92% 7%
23	21	98	94% 5%
24	12	72	96% 5%
24	22	72	85% 12%
25	13	60	92% 7%
25	23	60	93% 5%
26	14	71	86% 7%
26	24	71	75% 23%
27	15	60	87% 10%
27	25	60	93% 5%
28	16	54	87% 11%

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Mol	Chain	Length	Quality of chain
28	26	54	 89% 9% .
29	17	49	 18% 90% 8% .
29	27	49	 20% 92% 6% .
30	18	65	 2% 92% 6% .
30	28	65	 15% 94% 5% .
31	19	37	 97% .
31	29	37	 22% 95% 5% .
32	1a	1521	 2% 82% 17% .
32	2a	1521	 5% 81% 18% .
33	1b	256	 11% 79% 11% 10% .
33	2b	256	 20% 79% 11% 10% .
34	1c	239	 8% 82% . 14% .
34	2c	239	 20% 79% 7% 14% .
35	1d	209	 19% 93% 6% .
35	2d	209	 11% 90% 9% .
36	1e	162	 4% 89% . 9% .
36	2e	162	 14% 85% 7% 9% .
37	1f	101	 94% 5% .
37	2f	101	 % 93% 6% .
38	1g	156	 3% 94% 5% .
38	2g	156	 36% 90% 10% .
39	1h	138	 11% 95% . .
39	2h	138	 8% 93% 5% . .
40	1i	128	 16% 94% 5% .
40	2i	128	 70% 86% 12% .

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Mol	Chain	Length	Quality of chain
41	1j	105	21% 81% 10% 8%
41	2j	105	39% 76% 15% 9%
42	1k	129	3% 84% 5% 12%
42	2k	129	16% 84% 5% 12%
43	1l	132	8% 90% 8%
43	2l	132	11% 87% 5% 8%
44	1m	126	6% 84% 7% 8%
44	2m	126	44% 82% 9% 10%
45	1n	61	25% 90% 8%
45	2n	61	67% 93% 5%
46	1o	89	8% 93% 6%
46	2o	89	7% 93% 6%
47	1p	88	16% 76% 17% 7%
47	2p	88	10% 84% 9% 7%
48	1q	105	18% 90% 5% 6%
48	2q	105	14% 87% 8% 6%
49	1r	88	74% 23%
49	2r	88	8% 74% 23%
50	1s	93	3% 82% 8% 11%
50	2s	93	55% 78% 11% 11%
51	1t	106	20% 84% 6% 9%
51	2t	106	8% 84% 8% 8%
52	1u	27	30% 81% 15%
52	2u	27	70% 78% 7% 15%
53	1y	113	11% 85% 14%

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Mol	Chain	Length	Quality of chain
53	2y	113	<p>58% 80% 5% 15%</p>

The following table lists non-polymeric compounds, carbohydrate monomers and non-standard residues in protein, DNA, RNA chains that are outliers for geometric or electron-density-fit criteria:

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
54	MG	18	102	-	-	-	X
54	MG	1A	3086	-	-	-	X
54	MG	1A	3196	-	-	-	X
54	MG	1A	3277	-	-	-	X
54	MG	1A	3308	-	-	-	X
54	MG	1A	3327	-	-	-	X
54	MG	1A	3661	-	-	-	X
54	MG	1A	3669	-	-	-	X
54	MG	1A	3723	-	-	-	X
54	MG	1A	3844	-	-	-	X
54	MG	1B	207	-	-	-	X
54	MG	2A	3032	-	-	-	X
54	MG	2A	3167	-	-	-	X
54	MG	2A	3223	-	-	-	X
54	MG	2A	3542	-	-	-	X
54	MG	2A	3635	-	-	-	X

2 Entry composition [i](#)

There are 61 unique types of molecules in this entry. The entry contains 296967 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, the ZeroOcc column contains the number of atoms modelled with zero occupancy, the AltConf column contains the number of residues with at least one atom in alternate conformation and the Trace column contains the number of residues modelled with at most 2 atoms.

- Molecule 1 is a RNA chain called 23S Ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
1	1A	2872	Total	C	N	O	P	0	0	0
			61869	27540	11574	19884	2871			
1	2A	2867	Total	C	N	O	P	0	0	0
			61758	27491	11552	19850	2865			

- Molecule 2 is a RNA chain called 5S Ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
2	1B	120	Total	C	N	O	P	0	0	0
			2572	1145	476	832	119			
2	2B	120	Total	C	N	O	P	0	0	0
			2573	1146	476	832	119			

- Molecule 3 is a protein called 50S ribosomal protein L2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
3	1D	275	Total	C	N	O	S	0	0	0
			2131	1346	422	360	3			
3	2D	275	Total	C	N	O	S	0	0	0
			2136	1349	423	361	3			

- Molecule 4 is a protein called 50S ribosomal protein L3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
4	1E	204	Total	C	N	O	S	0	0	0
			1559	985	298	270	6			
4	2E	204	Total	C	N	O	S	0	0	0
			1559	985	298	270	6			

- Molecule 5 is a protein called 50S ribosomal protein L4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
5	1F	203	Total 1584	C 1009	N 298	O 275	S 2	0	0	1
5	2F	203	Total 1580	C 1007	N 297	O 274	S 2	0	0	1

- Molecule 6 is a protein called 50S ribosomal protein L5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
6	1G	181	Total 1426	C 916	N 253	O 253	S 4	0	0	0
6	2G	181	Total 1424	C 912	N 259	O 249	S 4	0	0	0

- Molecule 7 is a protein called 50S ribosomal protein L6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
7	1H	174	Total 1330	C 845	N 248	O 236	S 1	0	0	0
7	2H	173	Total 1324	C 842	N 247	O 234	S 1	0	0	0

- Molecule 8 is a protein called 50S ribosomal protein L9.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
8	1I	147	Total 1094	C 699	N 191	O 203	S 1	0	0	0
8	2I	146	Total 1076	C 687	N 186	O 202	S 1	0	0	0

- Molecule 9 is a protein called 50S ribosomal protein L13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
9	1N	140	Total 1121	C 722	N 208	O 187	S 4	0	0	0
9	2N	140	Total 1117	C 719	N 207	O 187	S 4	0	0	0

- Molecule 10 is a protein called 50S ribosomal protein L14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
10	1O	122	Total 933	C 588	N 171	O 170	S 4	0	0	0

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	2O	122	Total	C	N	O	S	0	0	0
			933	588	171	170	4			

- Molecule 11 is a protein called 50S ribosomal protein L15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	1P	149	Total	C	N	O	S	0	0	0
			1135	706	230	196	3			
11	2P	149	Total	C	N	O	S	0	0	0
			1135	706	230	196	3			

- Molecule 12 is a protein called 50S ribosomal protein L16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	1Q	141	Total	C	N	O	S	0	0	0
			1122	715	212	188	7			
12	2Q	141	Total	C	N	O	S	0	0	0
			1122	715	212	188	7			

- Molecule 13 is a protein called 50S ribosomal protein L17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	1R	118	Total	C	N	O	S	0	0	0
			968	604	203	160	1			
13	2R	118	Total	C	N	O	S	0	0	0
			968	604	203	160	1			

- Molecule 14 is a protein called 50S ribosomal protein L18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
14	1S	110	Total	C	N	O	0	0	0
			877	553	175	149			
14	2S	110	Total	C	N	O	0	0	0
			870	549	173	148			

- Molecule 15 is a protein called 50S ribosomal protein L19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	1T	131	Total	C	N	O	S	0	0	0
			1091	680	225	185	1			
15	2T	131	Total	C	N	O	S	0	0	0
			1083	675	224	183	1			

- Molecule 16 is a protein called 50S ribosomal protein L20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
16	1U	116	Total 959	C 608	N 201	O 149	S 1	0	0	0
16	2U	116	Total 959	C 608	N 201	O 149	S 1	0	0	0

- Molecule 17 is a protein called 50S ribosomal protein L21.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
17	1V	101	Total 775	C 498	N 141	O 135	S 1	0	0	0
17	2V	101	Total 771	C 495	N 140	O 135	S 1	0	0	0

- Molecule 18 is a protein called 50S ribosomal protein L22.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
18	1W	112	Total 886	C 557	N 174	O 153	S 2	0	0	0
18	2W	112	Total 886	C 557	N 174	O 153	S 2	0	0	0

- Molecule 19 is a protein called 50S ribosomal protein L23.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
19	1X	95	Total 750	C 488	N 135	O 126	S 1	0	0	0
19	2X	95	Total 750	C 488	N 135	O 126	S 1	0	0	0

- Molecule 20 is a protein called 50S ribosomal protein L24.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
20	1Y	107	Total 810	C 520	N 153	O 131	S 6	0	0	0
20	2Y	107	Total 810	C 519	N 153	O 132	S 6	0	0	0

- Molecule 21 is a protein called 50S ribosomal protein L25.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
21	1Z	203	Total	C	N	O	S	0	0	0
			1587	1011	282	292	2			
21	2Z	201	Total	C	N	O	S	0	0	0
			1557	995	274	286	2			

- Molecule 22 is a protein called 50S ribosomal protein L27.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	10	77	Total	C	N	O	S	0	0	0
			608	375	129	103	1			
22	20	77	Total	C	N	O	S	0	0	0
			608	375	129	103	1			

- Molecule 23 is a protein called 50S ribosomal protein L28.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
23	11	97	Total	C	N	O	S	0	0	0
			754	475	148	130	1			
23	21	97	Total	C	N	O	S	0	0	0
			759	478	149	131	1			

- Molecule 24 is a protein called 50S ribosomal protein L29.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
24	12	70	Total	C	N	O	S	0	0	0
			588	365	118	103	2			
24	22	70	Total	C	N	O	S	0	0	0
			592	368	119	103	2			

- Molecule 25 is a protein called 50S ribosomal protein L30.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
25	13	59	Total	C	N	O	0	0	0
			469	298	90	81			
25	23	59	Total	C	N	O	0	0	0
			464	296	90	78			

- Molecule 26 is a protein called 50S ribosomal protein L31.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	14	69	Total	C	N	O	S	0	0	0
			546	346	96	99	5			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	24	69	Total	C	N	O	S	0	0	0
			536	342	98	91	5			

- Molecule 27 is a protein called 50S ribosomal protein L32.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
27	15	59	Total	C	N	O	S	0	0	0
			459	288	90	76	5			
27	25	59	Total	C	N	O	S	0	0	0
			455	285	89	76	5			

- Molecule 28 is a protein called 50S ribosomal protein L33.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
28	16	53	Total	C	N	O	S	0	0	0
			453	281	91	77	4			
28	26	53	Total	C	N	O	S	0	0	0
			449	279	91	75	4			

- Molecule 29 is a protein called 50S ribosomal protein L34.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
29	17	48	Total	C	N	O	S	0	0	0
			418	257	104	55	2			
29	27	48	Total	C	N	O	S	0	0	0
			418	257	104	55	2			

- Molecule 30 is a protein called 50S ribosomal protein L35.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
30	18	64	Total	C	N	O	S	0	0	0
			517	331	102	82	2			
30	28	64	Total	C	N	O	S	0	0	0
			517	331	102	82	2			

- Molecule 31 is a protein called 50S ribosomal protein L36.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
31	19	37	Total	C	N	O	S	0	0	0
			307	188	68	47	4			
31	29	37	Total	C	N	O	S	0	0	0
			307	188	68	47	4			

- Molecule 32 is a RNA chain called 16S Ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
32	1a	1500	Total	C	N	O	P	0	0	0
			32246	14358	5975	10413	1500			
32	2a	1504	Total	C	N	O	P	0	0	0
			32331	14396	5990	10441	1504			

- Molecule 33 is a protein called 30S ribosomal protein S2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
33	1b	231	Total	C	N	O	S	0	0	0
			1842	1175	330	332	5			
33	2b	231	Total	C	N	O	S	0	0	0
			1825	1167	326	327	5			

- Molecule 34 is a protein called 30S ribosomal protein S3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
34	1c	206	Total	C	N	O	S	0	0	0
			1558	979	305	273	1			
34	2c	206	Total	C	N	O	S	0	0	0
			1542	968	300	273	1			

- Molecule 35 is a protein called 30S ribosomal protein S4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
35	1d	208	Total	C	N	O	S	0	0	0
			1665	1043	329	286	7			
35	2d	208	Total	C	N	O	S	0	0	0
			1668	1047	330	284	7			

- Molecule 36 is a protein called 30S ribosomal protein S5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
36	1e	148	Total	C	N	O	S	0	0	0
			1133	716	214	199	4			
36	2e	148	Total	C	N	O	S	0	0	0
			1133	716	214	199	4			

- Molecule 37 is a protein called 30S ribosomal protein S6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
37	1f	100	Total	C	N	O	S	0	0	0
			814	516	144	151	3			
37	2f	100	Total	C	N	O	S	0	0	0
			816	516	146	151	3			

- Molecule 38 is a protein called 30S ribosomal protein S7.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
38	1g	155	Total	C	N	O	S	0	0	0
			1235	769	244	216	6			
38	2g	155	Total	C	N	O	S	0	0	0
			1229	766	241	216	6			

- Molecule 39 is a protein called 30S ribosomal protein S8.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
39	1h	137	Total	C	N	O	S	0	0	0
			1098	694	210	192	2			
39	2h	137	Total	C	N	O	S	0	0	0
			1088	689	206	191	2			

- Molecule 40 is a protein called 30S ribosomal protein S9.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
40	1i	127	Total	C	N	O	0	0	0
			986	625	193	168			
40	2i	126	Total	C	N	O	0	0	0
			966	613	186	167			

- Molecule 41 is a protein called 30S ribosomal protein S10.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
41	1j	97	Total	C	N	O	0	0	0
			719	446	142	131			
41	2j	96	Total	C	N	O	0	0	0
			710	442	137	131			

- Molecule 42 is a protein called 30S ribosomal protein S11.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	1k	114	Total	C	N	O	S	0	0	0
			834	520	156	155	3			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	2k	114	Total	C	N	O	S	0	0	0
			833	519	156	155	3			

- Molecule 43 is a protein called 30S ribosomal protein S12.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
43	1l	122	Total	C	N	O	S	0	0	0
			932	586	185	159	2			
43	2l	122	Total	C	N	O	S	0	0	0
			932	586	185	159	2			

- Molecule 44 is a protein called 30S ribosomal protein S13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
44	1m	116	Total	C	N	O	S	0	0	0
			914	564	189	159	2			
44	2m	114	Total	C	N	O	S	0	0	0
			895	550	186	157	2			

- Molecule 45 is a protein called 30S ribosomal protein S14 type Z.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
45	1n	60	Total	C	N	O	S	0	0	0
			492	312	104	72	4			
45	2n	60	Total	C	N	O	S	0	0	0
			492	312	104	72	4			

- Molecule 46 is a protein called 30S ribosomal protein S15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
46	1o	88	Total	C	N	O	S	0	0	0
			728	456	144	126	2			
46	2o	88	Total	C	N	O	S	0	0	0
			728	456	144	126	2			

- Molecule 47 is a protein called 30S ribosomal protein S16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
47	1p	82	Total	C	N	O	S	0	0	0
			681	433	134	113	1			
47	2p	82	Total	C	N	O	S	0	0	0
			677	430	133	113	1			

- Molecule 48 is a protein called 30S ribosomal protein S17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
48	1q	99	Total	C	N	O	S	0	0	0
			823	528	151	142	2			
48	2q	99	Total	C	N	O	S	0	0	0
			823	528	151	142	2			

- Molecule 49 is a protein called 30S ribosomal protein S18.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
49	1r	68	Total	C	N	O		0	0	0
			555	355	108	92				
49	2r	68	Total	C	N	O		0	0	0
			555	355	108	92				

- Molecule 50 is a protein called 30S ribosomal protein S19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
50	1s	83	Total	C	N	O	S	0	0	0
			648	415	120	111	2			
50	2s	83	Total	C	N	O	S	0	0	0
			645	410	118	115	2			

- Molecule 51 is a protein called 30S ribosomal protein S20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
51	1t	96	Total	C	N	O	S	0	0	0
			732	449	157	124	2			
51	2t	98	Total	C	N	O	S	0	0	0
			733	451	154	126	2			

- Molecule 52 is a protein called 30S ribosomal protein Thx.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace	
52	1u	23	Total	C	N	O		0	0	0
			199	122	48	29				
52	2u	23	Total	C	N	O		0	0	0
			199	122	48	29				

- Molecule 53 is a protein called Ribosome-associated inhibitor A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
53	1y	97	Total	C	N	O	S	0	0	0
			764	478	144	139	3			
53	2y	96	Total	C	N	O	S	0	0	0
			749	468	141	137	3			

- Molecule 54 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
54	1A	1040	Total	Mg	0	0
			1040	1040		
54	1B	29	Total	Mg	0	0
			29	29		
54	1D	18	Total	Mg	0	0
			18	18		
54	1E	8	Total	Mg	0	0
			8	8		
54	1F	18	Total	Mg	0	0
			18	18		
54	1G	4	Total	Mg	0	0
			4	4		
54	1H	2	Total	Mg	0	0
			2	2		
54	1N	4	Total	Mg	0	0
			4	4		
54	1O	1	Total	Mg	0	0
			1	1		
54	1P	5	Total	Mg	0	0
			5	5		
54	1Q	5	Total	Mg	0	0
			5	5		
54	1R	5	Total	Mg	0	0
			5	5		
54	1T	5	Total	Mg	0	0
			5	5		
54	1U	7	Total	Mg	0	0
			7	7		
54	1V	6	Total	Mg	0	0
			6	6		
54	1W	3	Total	Mg	0	0
			3	3		
54	1Y	1	Total	Mg	0	0
			1	1		
54	1Z	1	Total	Mg	0	0
			1	1		

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
54	10	8	Total Mg 8 8	0	0
54	11	5	Total Mg 5 5	0	0
54	13	3	Total Mg 3 3	0	0
54	14	1	Total Mg 1 1	0	0
54	15	8	Total Mg 8 8	0	0
54	17	6	Total Mg 6 6	0	0
54	18	2	Total Mg 2 2	0	0
54	19	2	Total Mg 2 2	0	0
54	1a	279	Total Mg 279 279	0	0
54	1b	1	Total Mg 1 1	0	0
54	1d	5	Total Mg 5 5	0	0
54	1e	3	Total Mg 3 3	0	0
54	1f	2	Total Mg 2 2	0	0
54	1g	3	Total Mg 3 3	0	0
54	1h	2	Total Mg 2 2	0	0
54	1i	1	Total Mg 1 1	0	0
54	1k	1	Total Mg 1 1	0	0
54	1l	2	Total Mg 2 2	0	0
54	1m	2	Total Mg 2 2	0	0
54	1n	2	Total Mg 2 2	0	0
54	1o	1	Total Mg 1 1	0	0

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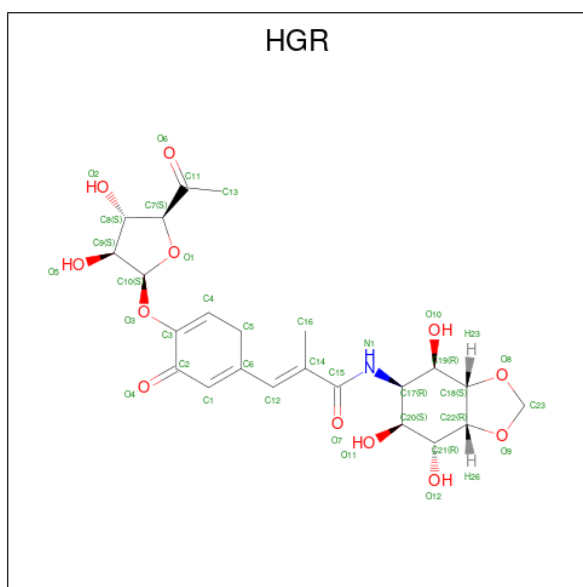
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
54	1t	1	Total Mg 1 1	0	0
54	1y	3	Total Mg 3 3	0	0
54	2A	730	Total Mg 730 730	0	0
54	2B	18	Total Mg 18 18	0	0
54	2D	13	Total Mg 13 13	0	0
54	2E	6	Total Mg 6 6	0	0
54	2F	4	Total Mg 4 4	0	0
54	2G	2	Total Mg 2 2	0	0
54	2I	1	Total Mg 1 1	0	0
54	2O	2	Total Mg 2 2	0	0
54	2P	1	Total Mg 1 1	0	0
54	2Q	1	Total Mg 1 1	0	0
54	2R	3	Total Mg 3 3	0	0
54	2T	3	Total Mg 3 3	0	0
54	2U	1	Total Mg 1 1	0	0
54	2V	2	Total Mg 2 2	0	0
54	2W	2	Total Mg 2 2	0	0
54	2X	1	Total Mg 1 1	0	0
54	2Y	1	Total Mg 1 1	0	0
54	20	1	Total Mg 1 1	0	0
54	21	2	Total Mg 2 2	0	0

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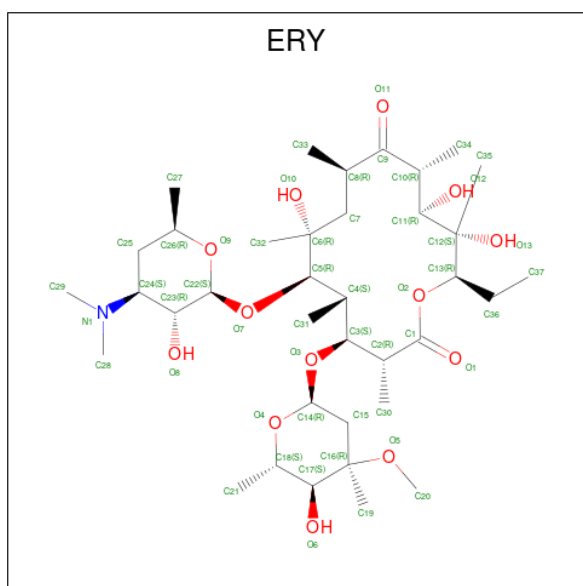
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
54	23	1	Total Mg 1 1	0	0
54	25	3	Total Mg 3 3	0	0
54	27	2	Total Mg 2 2	0	0
54	28	2	Total Mg 2 2	0	0
54	2a	190	Total Mg 190 190	0	0
54	2e	2	Total Mg 2 2	0	0
54	2f	1	Total Mg 1 1	0	0
54	2j	1	Total Mg 1 1	0	0
54	2k	1	Total Mg 1 1	0	0
54	2n	1	Total Mg 1 1	0	0
54	2r	2	Total Mg 2 2	0	0
54	2t	1	Total Mg 1 1	0	0
54	2y	1	Total Mg 1 1	0	0

- Molecule 55 is Hygromycin A (three-letter code: HGR) (formula: $C_{23}H_{29}NO_{12}$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf	
			Total	C	N			O
55	1A	1	36	23	1	12	0	0
55	2A	1	36	23	1	12	0	0

- Molecule 56 is ERYTHROMYCIN A (three-letter code: ERY) (formula: $C_{37}H_{67}NO_{13}$) (labeled as "Ligand of Interest" by depositor).



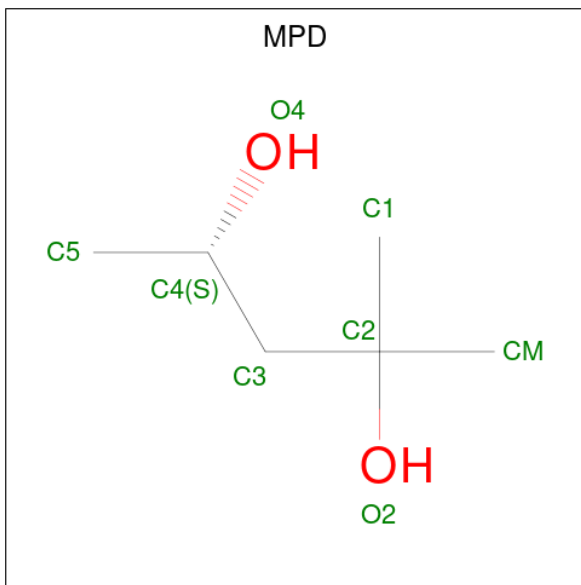
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf	
			Total	C	N			O
56	1A	1	51	37	1	13	0	0

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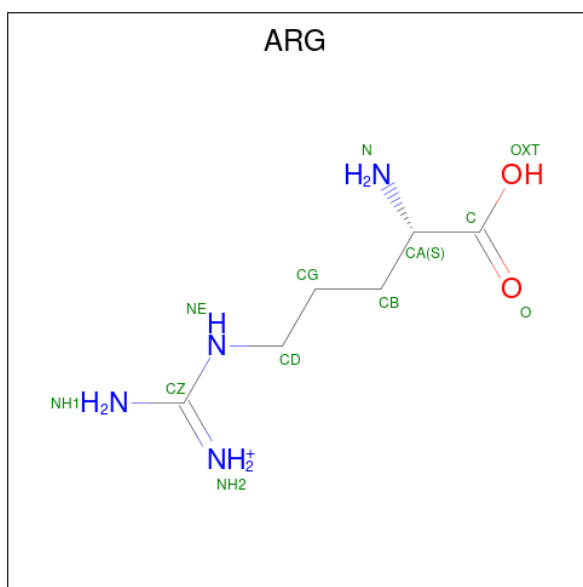
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf	
			Total	C	N			O
56	2A	1	51	37	1	13	0	0

- Molecule 57 is (4S)-2-METHYL-2,4-PENTANEDIOL (three-letter code: MPD) (formula: $C_6H_{14}O_2$).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	C	O		
57	1A	1	8	6	2	0	0
57	1T	1	8	6	2	0	0
57	18	1	8	6	2	0	0
57	1a	1	8	6	2	0	0
57	2A	1	8	6	2	0	0
57	2A	1	8	6	2	0	0
57	2B	1	8	6	2	0	0

- Molecule 58 is ARGinine (three-letter code: ARG) (formula: $C_6H_{15}N_4O_2$).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
58	1B	1	Total	C	N	O	0	0
			12	6	4	2		
58	1F	1	Total	C	N	O	0	0
			12	6	4	2		

- Molecule 59 is ZINC ION (three-letter code: ZN) (formula: Zn).

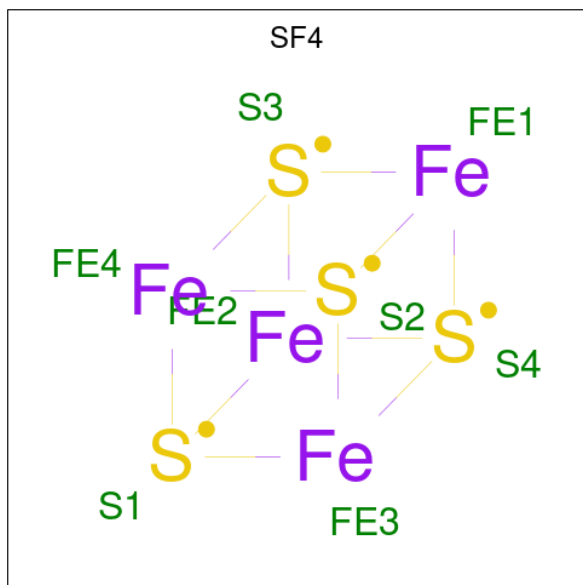
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
59	1Y	1	Total	Zn	0	0
			1	1		
59	14	1	Total	Zn	0	0
			1	1		
59	15	1	Total	Zn	0	0
			1	1		
59	16	1	Total	Zn	0	0
			1	1		
59	19	1	Total	Zn	0	0
			1	1		
59	1n	1	Total	Zn	0	0
			1	1		
59	2Y	1	Total	Zn	0	0
			1	1		
59	24	1	Total	Zn	0	0
			1	1		
59	25	1	Total	Zn	0	0
			1	1		
59	26	1	Total	Zn	0	0
			1	1		

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
59	29	1	Total Zn 1 1	0	0
59	2n	1	Total Zn 1 1	0	0

- Molecule 60 is IRON/SULFUR CLUSTER (three-letter code: SF4) (formula: Fe₄S₄).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
60	1d	1	Total Fe S 8 4 4	0	0
60	2d	1	Total Fe S 8 4 4	0	0

- Molecule 61 is water.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	1A	3898	Total O 3898 3898	0	0
61	1B	94	Total O 94 94	0	0
61	1D	103	Total O 103 103	0	0
61	1E	68	Total O 68 68	0	0
61	1F	64	Total O 64 64	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	1G	16	Total O 16 16	0	0
61	1H	15	Total O 15 15	0	0
61	1I	5	Total O 5 5	0	0
61	1N	45	Total O 45 45	0	0
61	1O	22	Total O 22 22	0	0
61	1P	56	Total O 56 56	0	0
61	1Q	37	Total O 37 37	0	0
61	1R	29	Total O 29 29	0	0
61	1S	12	Total O 12 12	0	0
61	1T	37	Total O 37 37	0	0
61	1U	41	Total O 41 41	0	0
61	1V	34	Total O 34 34	0	0
61	1W	27	Total O 27 27	0	0
61	1X	27	Total O 27 27	0	0
61	1Y	16	Total O 16 16	0	0
61	1Z	5	Total O 5 5	0	0
61	10	21	Total O 21 21	0	0
61	11	28	Total O 28 28	0	0
61	12	14	Total O 14 14	0	0
61	13	22	Total O 22 22	0	0
61	14	4	Total O 4 4	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
61	15	25	Total 25	O 25	0	0
61	16	21	Total 21	O 21	0	0
61	17	13	Total 13	O 13	0	0
61	18	23	Total 23	O 23	0	0
61	19	2	Total 2	O 2	0	0
61	1a	447	Total 447	O 447	0	0
61	1b	1	Total 1	O 1	0	0
61	1c	2	Total 2	O 2	0	0
61	1d	9	Total 9	O 9	0	0
61	1e	5	Total 5	O 5	0	0
61	1f	1	Total 1	O 1	0	0
61	1h	1	Total 1	O 1	0	0
61	1j	1	Total 1	O 1	0	0
61	1l	3	Total 3	O 3	0	0
61	1o	2	Total 2	O 2	0	0
61	1p	2	Total 2	O 2	0	0
61	1y	1	Total 1	O 1	0	0
61	2A	1941	Total 1941	O 1941	0	0
61	2B	45	Total 45	O 45	0	0
61	2D	45	Total 45	O 45	0	0
61	2E	25	Total 25	O 25	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
61	2F	15	Total 15	O 15	0	0
61	2G	2	Total 2	O 2	0	0
61	2H	1	Total 1	O 1	0	0
61	2I	1	Total 1	O 1	0	0
61	2N	3	Total 3	O 3	0	0
61	2O	10	Total 10	O 10	0	0
61	2P	19	Total 19	O 19	0	0
61	2Q	13	Total 13	O 13	0	0
61	2R	17	Total 17	O 17	0	0
61	2T	6	Total 6	O 6	0	0
61	2U	7	Total 7	O 7	0	0
61	2V	4	Total 4	O 4	0	0
61	2W	20	Total 20	O 20	0	0
61	2X	7	Total 7	O 7	0	0
61	2Y	2	Total 2	O 2	0	0
61	2Z	7	Total 7	O 7	0	0
61	20	5	Total 5	O 5	0	0
61	21	15	Total 15	O 15	0	0
61	22	1	Total 1	O 1	0	0
61	23	2	Total 2	O 2	0	0
61	25	7	Total 7	O 7	0	0

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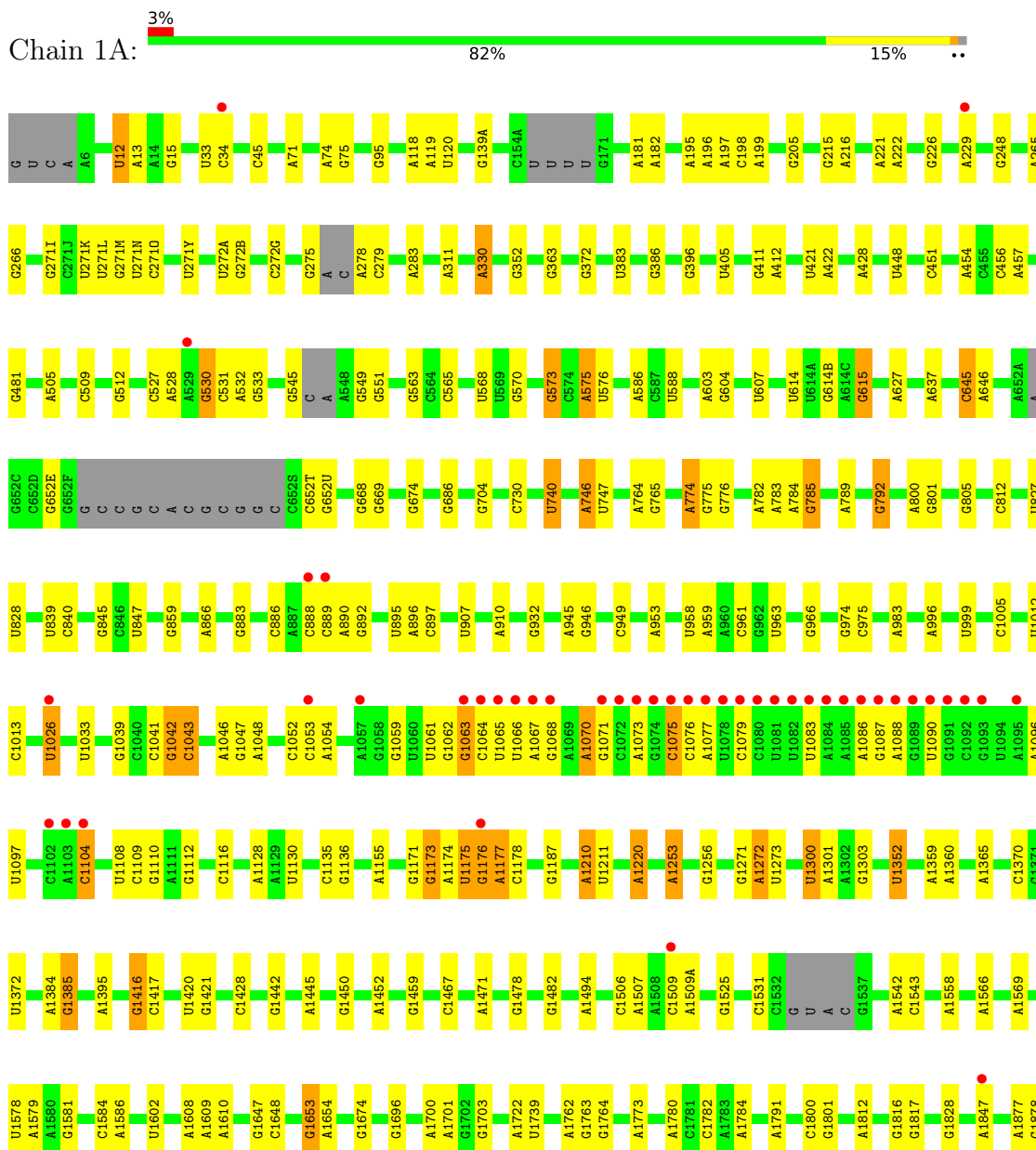
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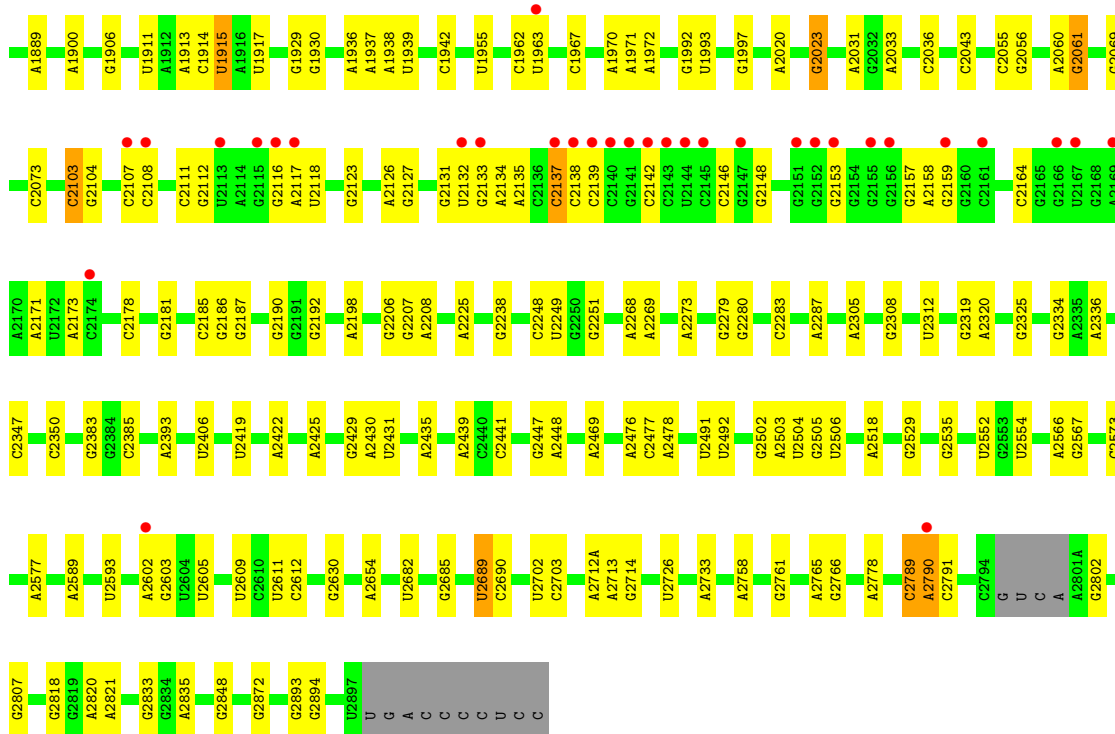
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	26	2	Total O 2 2	0	0
61	27	8	Total O 8 8	0	0
61	28	9	Total O 9 9	0	0
61	2a	266	Total O 266 266	0	0
61	2d	4	Total O 4 4	0	0
61	2e	1	Total O 1 1	0	0
61	2l	1	Total O 1 1	0	0
61	2o	2	Total O 2 2	0	0
61	2q	1	Total O 1 1	0	0
61	2r	3	Total O 3 3	0	0
61	2u	1	Total O 1 1	0	0

3 Residue-property plots

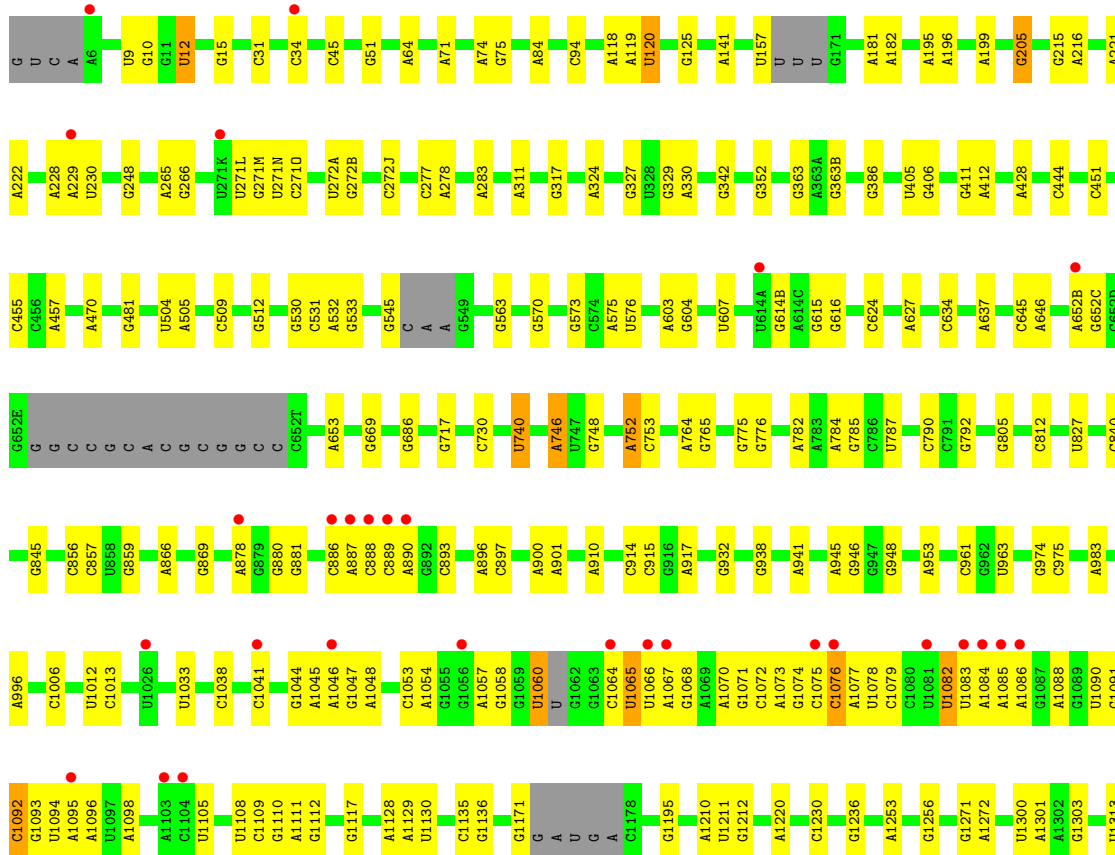
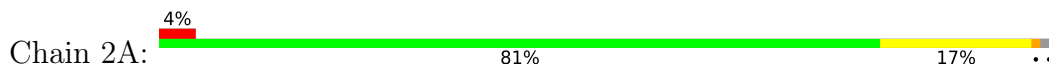
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red dot above a residue indicates a poor fit to the electron density ($RSRZ > 2$). Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

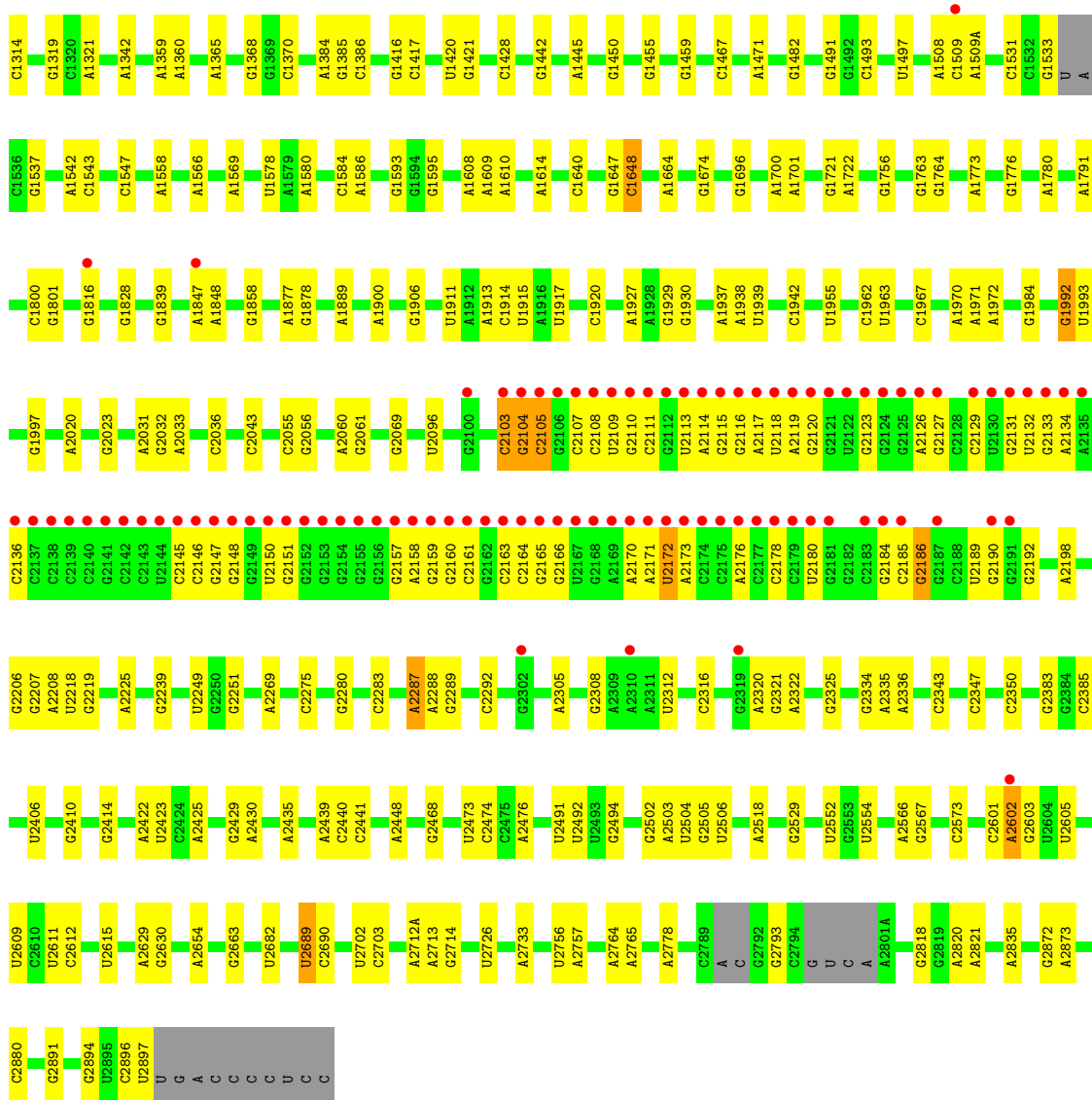
- Molecule 1: 23S Ribosomal RNA



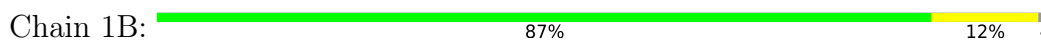


• Molecule 1: 23S Ribosomal RNA

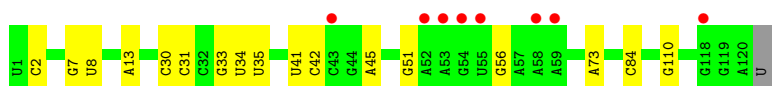
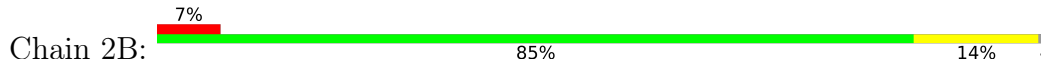




• Molecule 2: 5S Ribosomal RNA



• Molecule 2: 5S Ribosomal RNA

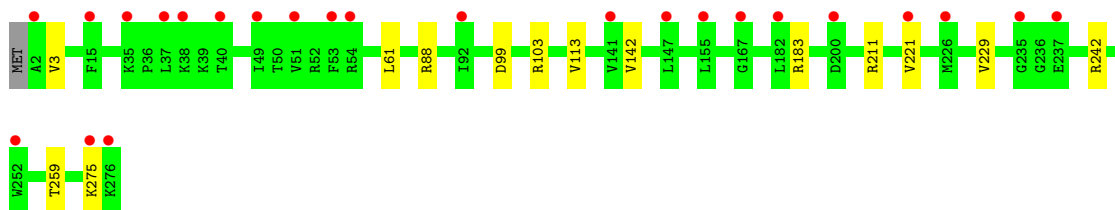


• Molecule 3: 50S ribosomal protein L2





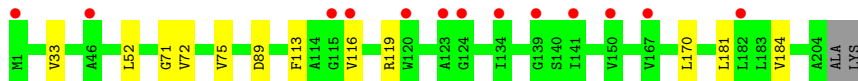
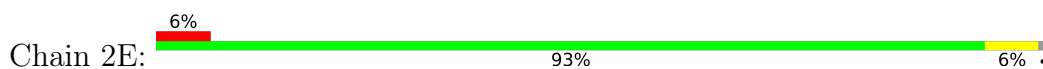
- Molecule 3: 50S ribosomal protein L2



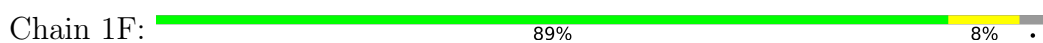
- Molecule 4: 50S ribosomal protein L3



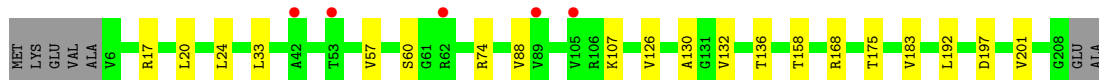
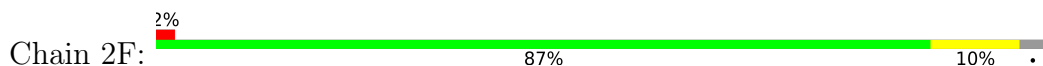
- Molecule 4: 50S ribosomal protein L3



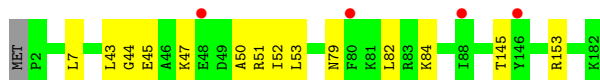
- Molecule 5: 50S ribosomal protein L4



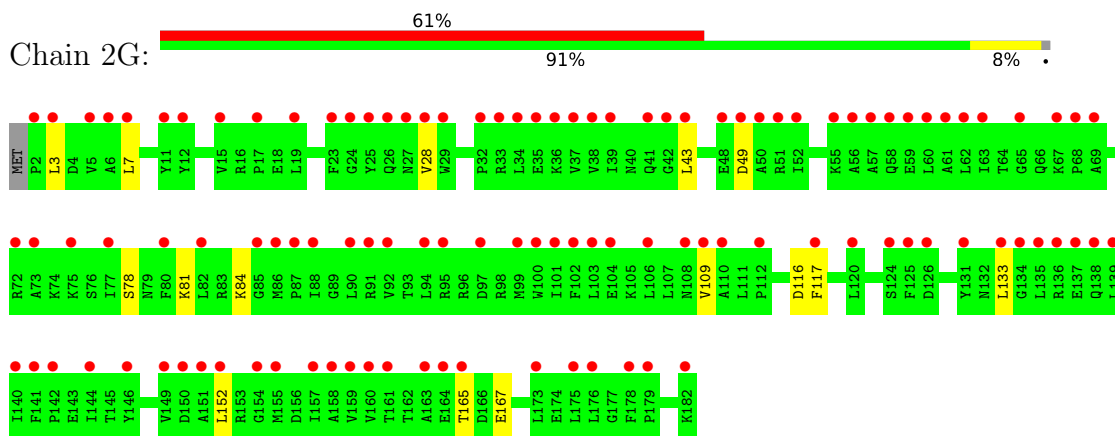
- Molecule 5: 50S ribosomal protein L4



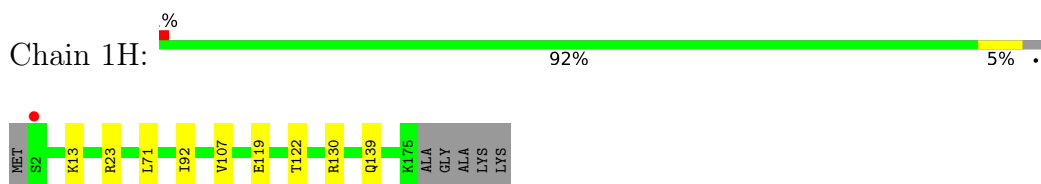
- Molecule 6: 50S ribosomal protein L5



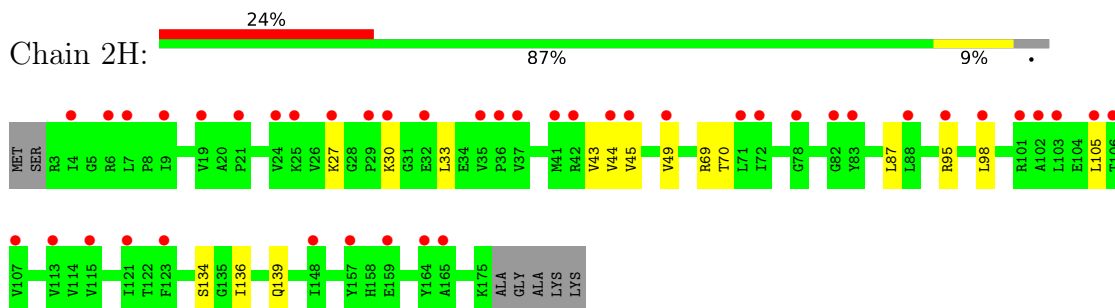
- Molecule 6: 50S ribosomal protein L5



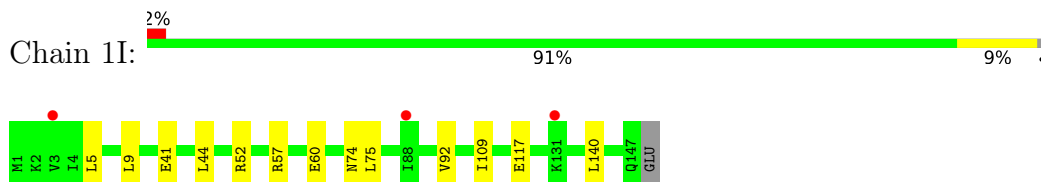
- Molecule 7: 50S ribosomal protein L6



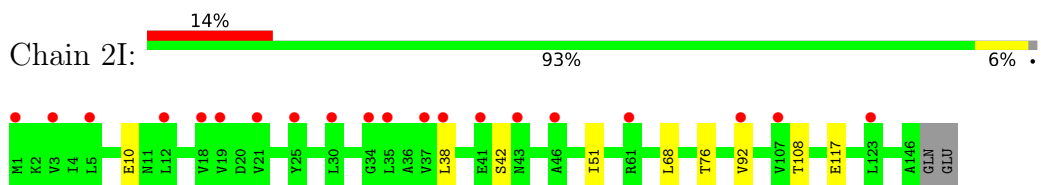
- Molecule 7: 50S ribosomal protein L6



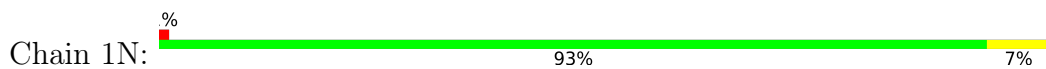
- Molecule 8: 50S ribosomal protein L9



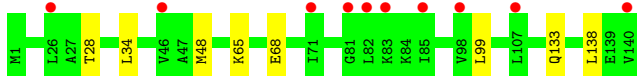
- Molecule 8: 50S ribosomal protein L9



- Molecule 9: 50S ribosomal protein L13



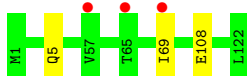
- Molecule 9: 50S ribosomal protein L13



- Molecule 10: 50S ribosomal protein L14



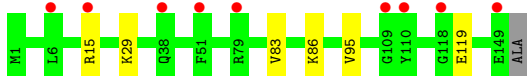
- Molecule 10: 50S ribosomal protein L14



- Molecule 11: 50S ribosomal protein L15



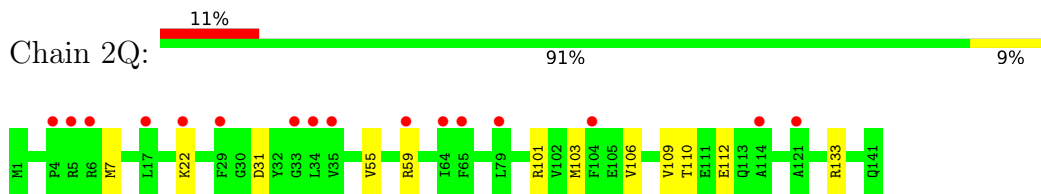
- Molecule 11: 50S ribosomal protein L15



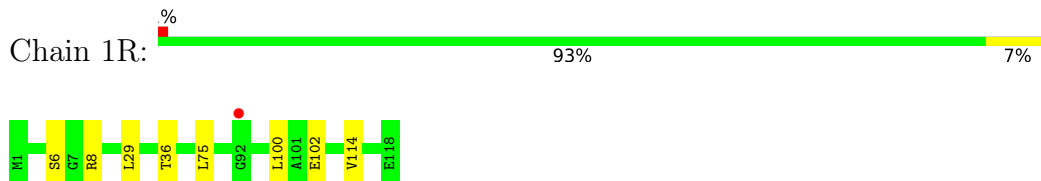
- Molecule 12: 50S ribosomal protein L16



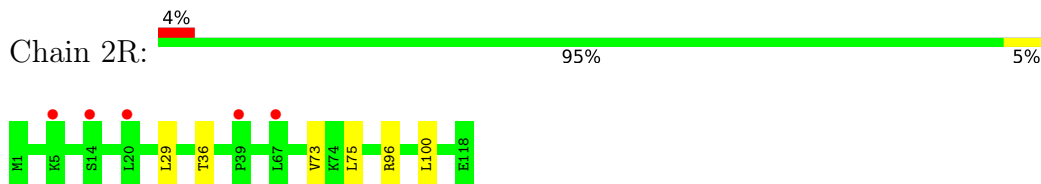
- Molecule 12: 50S ribosomal protein L16



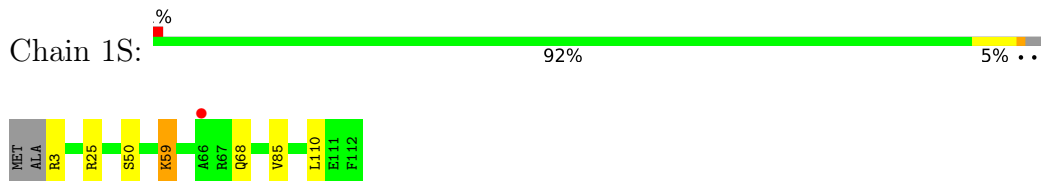
- Molecule 13: 50S ribosomal protein L17



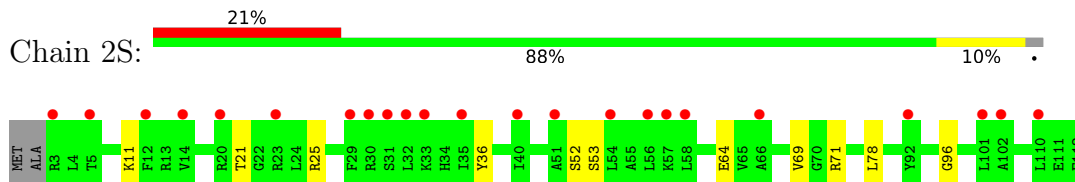
- Molecule 13: 50S ribosomal protein L17



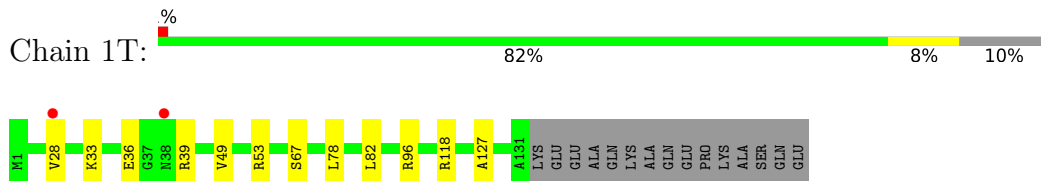
- Molecule 14: 50S ribosomal protein L18



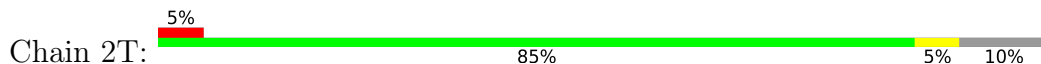
- Molecule 14: 50S ribosomal protein L18

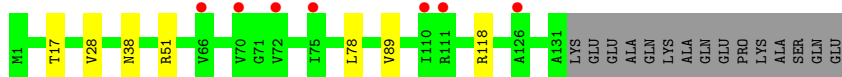


- Molecule 15: 50S ribosomal protein L19



- Molecule 15: 50S ribosomal protein L19





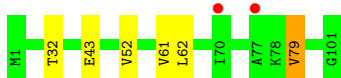
- Molecule 16: 50S ribosomal protein L20



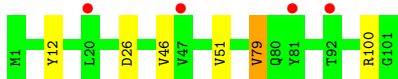
- Molecule 16: 50S ribosomal protein L20



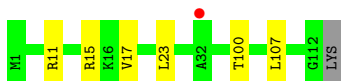
- Molecule 17: 50S ribosomal protein L21



- Molecule 17: 50S ribosomal protein L21



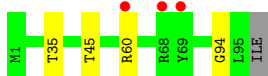
- Molecule 18: 50S ribosomal protein L22



- Molecule 18: 50S ribosomal protein L22



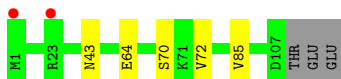
- Molecule 19: 50S ribosomal protein L23



- Molecule 19: 50S ribosomal protein L23



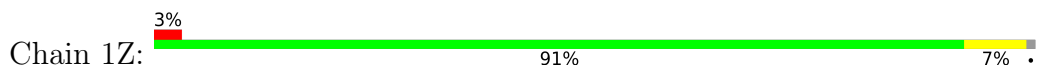
- Molecule 20: 50S ribosomal protein L24



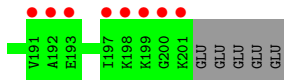
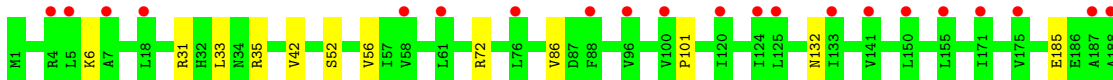
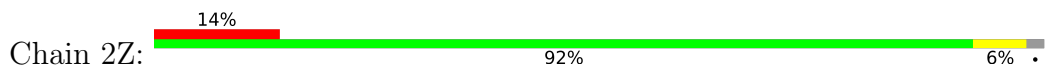
- Molecule 20: 50S ribosomal protein L24



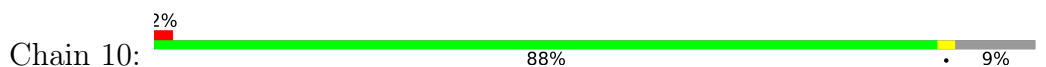
- Molecule 21: 50S ribosomal protein L25

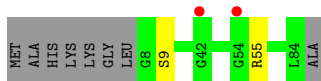


- Molecule 21: 50S ribosomal protein L25

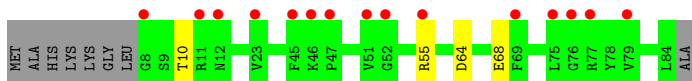
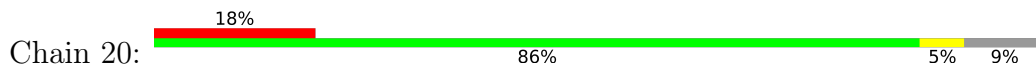


- Molecule 22: 50S ribosomal protein L27

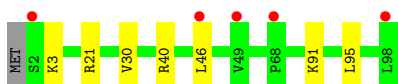
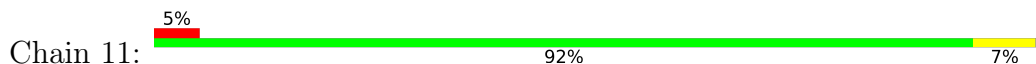




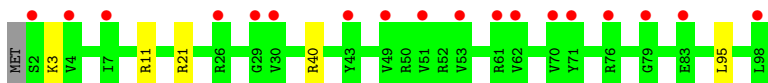
- Molecule 22: 50S ribosomal protein L27



- Molecule 23: 50S ribosomal protein L28



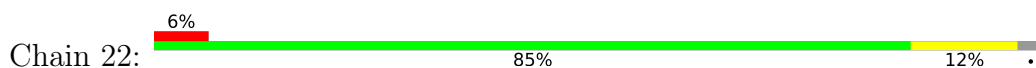
- Molecule 23: 50S ribosomal protein L28



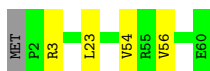
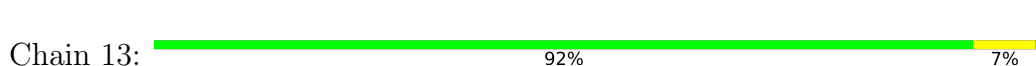
- Molecule 24: 50S ribosomal protein L29



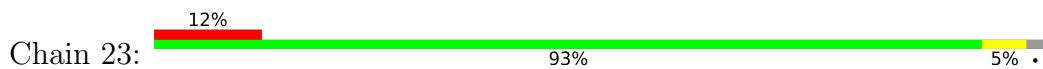
- Molecule 24: 50S ribosomal protein L29



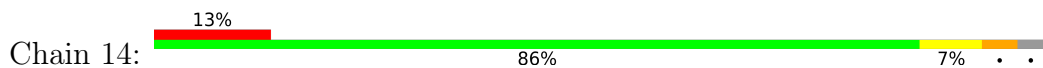
- Molecule 25: 50S ribosomal protein L30



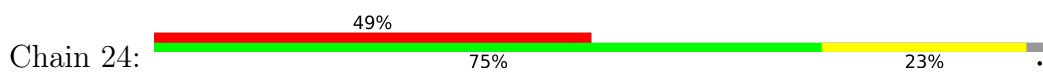
- Molecule 25: 50S ribosomal protein L30



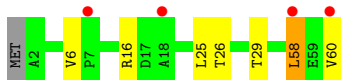
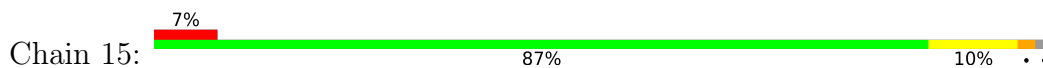
- Molecule 26: 50S ribosomal protein L31



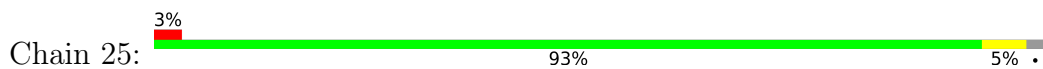
- Molecule 26: 50S ribosomal protein L31



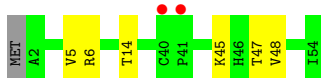
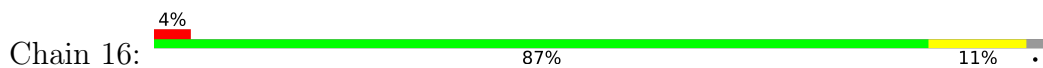
- Molecule 27: 50S ribosomal protein L32



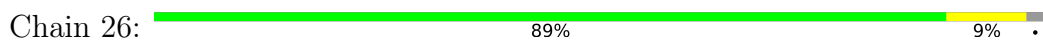
- Molecule 27: 50S ribosomal protein L32



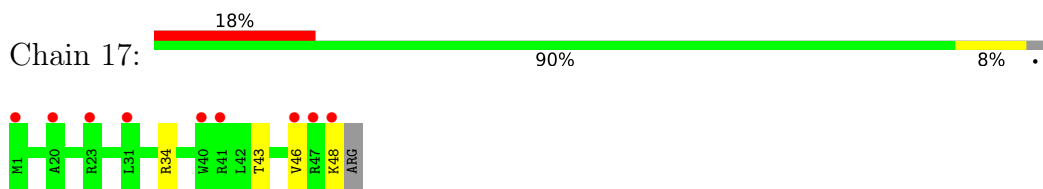
- Molecule 28: 50S ribosomal protein L33



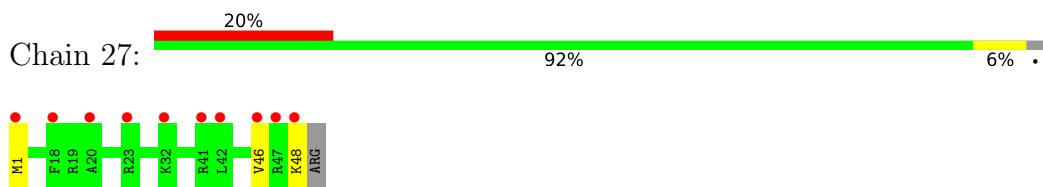
- Molecule 28: 50S ribosomal protein L33



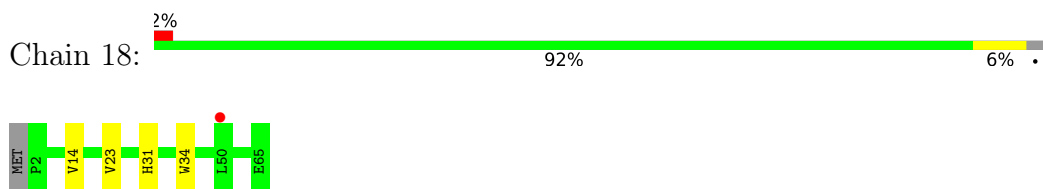
- Molecule 29: 50S ribosomal protein L34



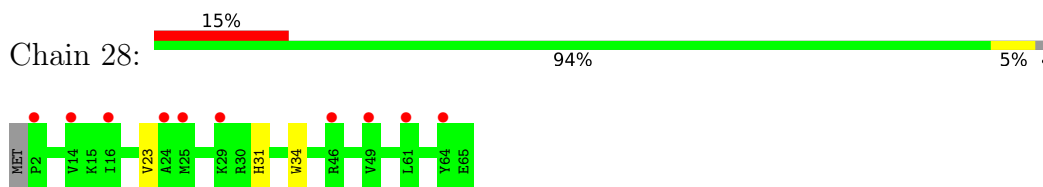
- Molecule 29: 50S ribosomal protein L34



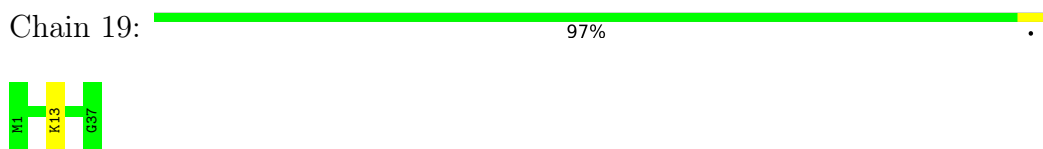
- Molecule 30: 50S ribosomal protein L35



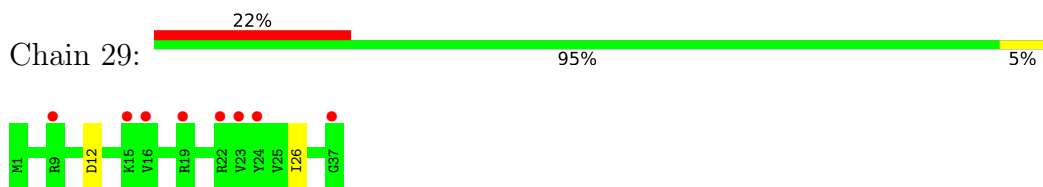
- Molecule 30: 50S ribosomal protein L35



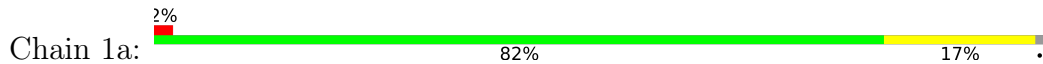
- Molecule 31: 50S ribosomal protein L36

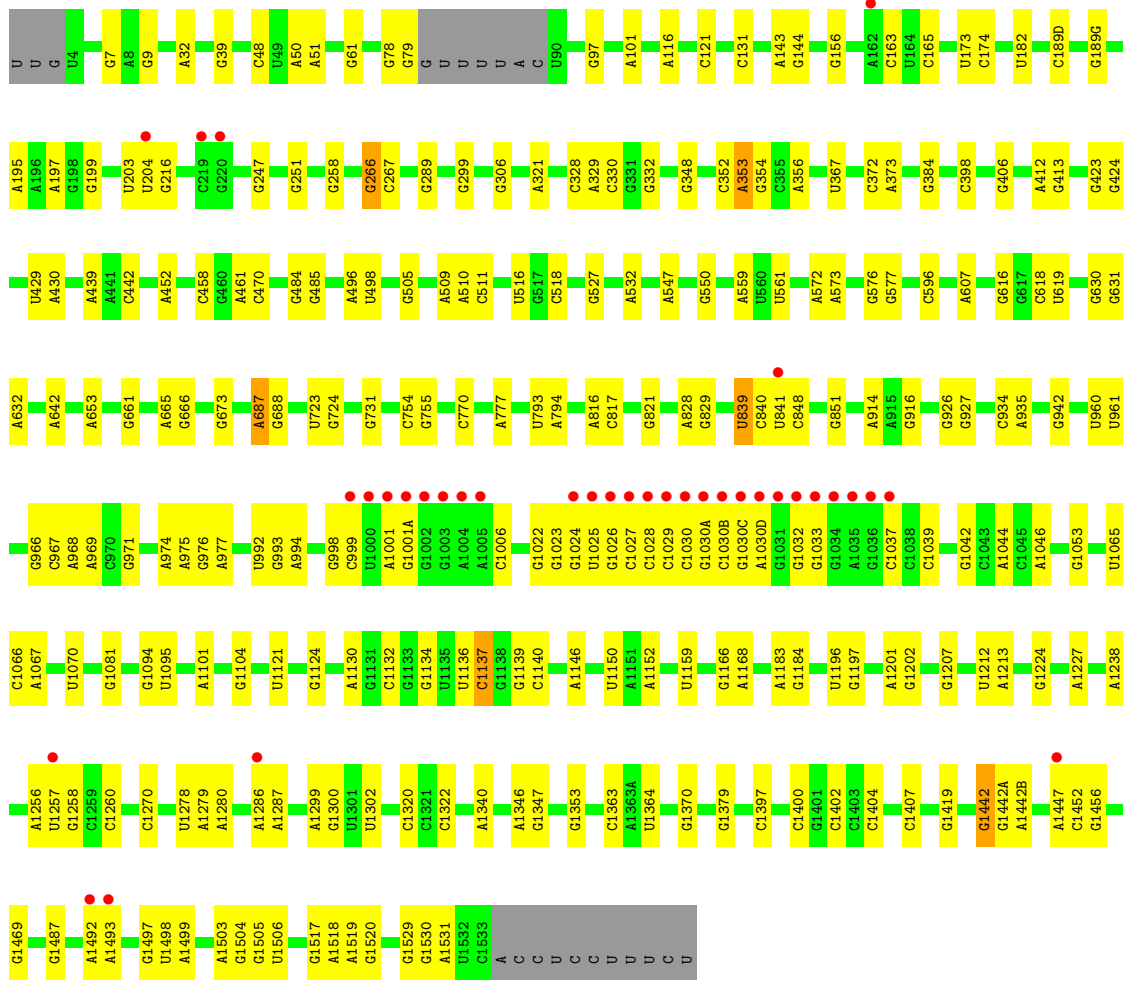


- Molecule 31: 50S ribosomal protein L36

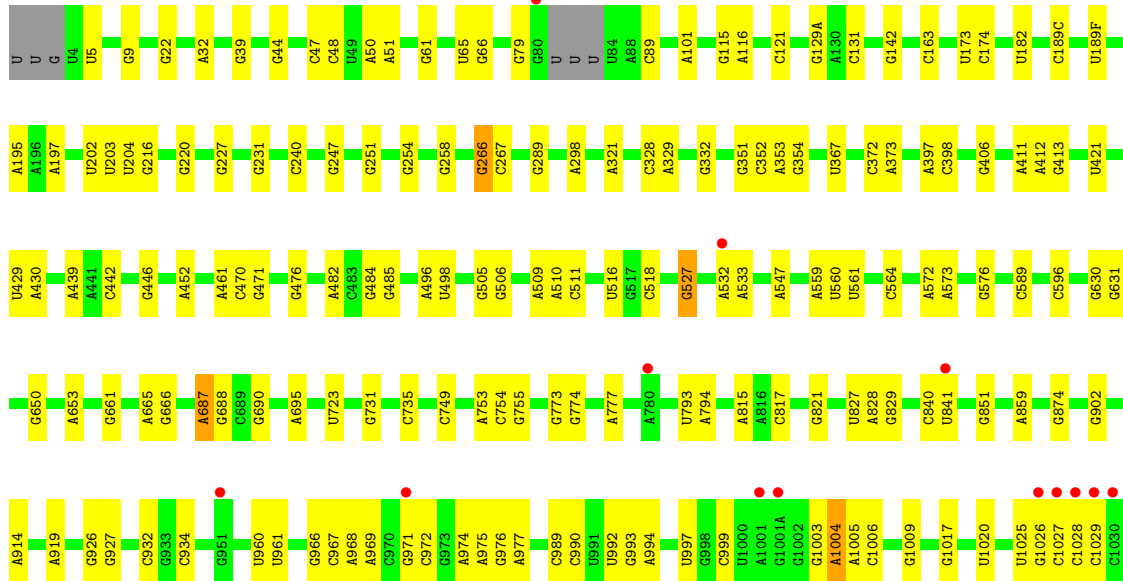
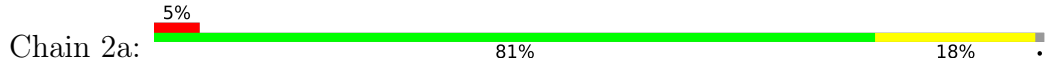


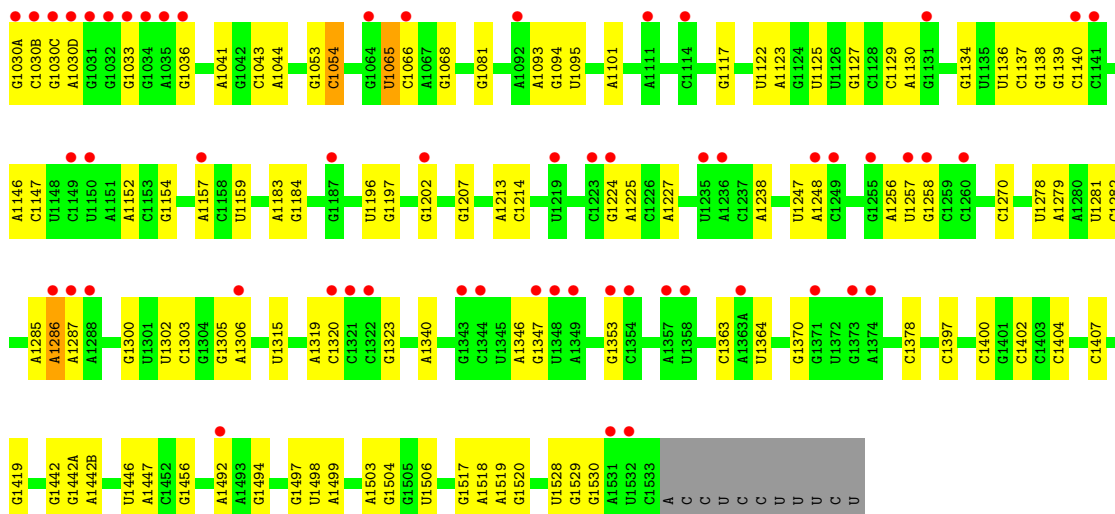
- Molecule 32: 16S Ribosomal RNA



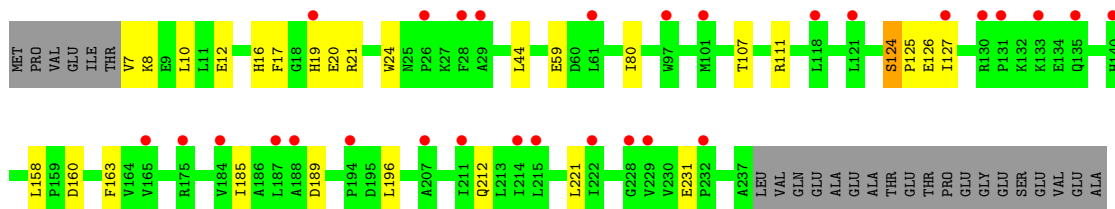
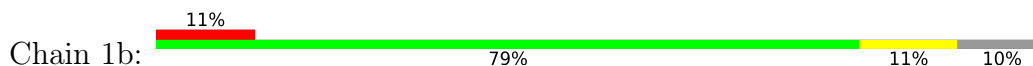


• Molecule 32: 16S Ribosomal RNA

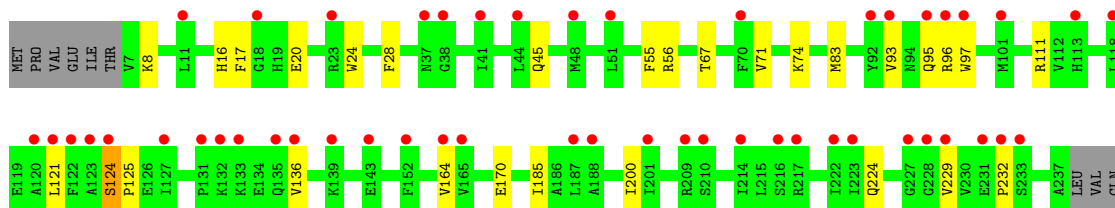
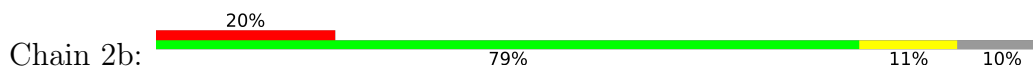




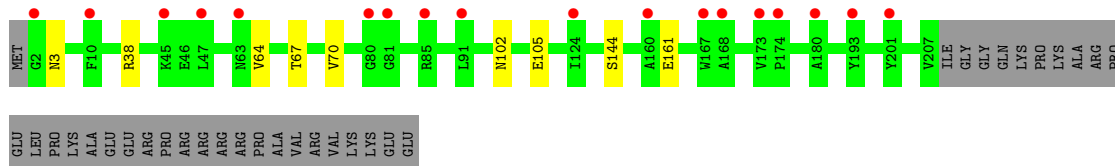
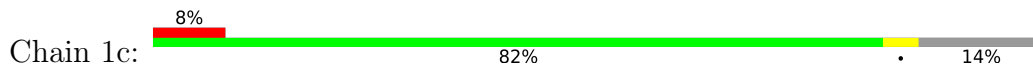
• Molecule 33: 30S ribosomal protein S2



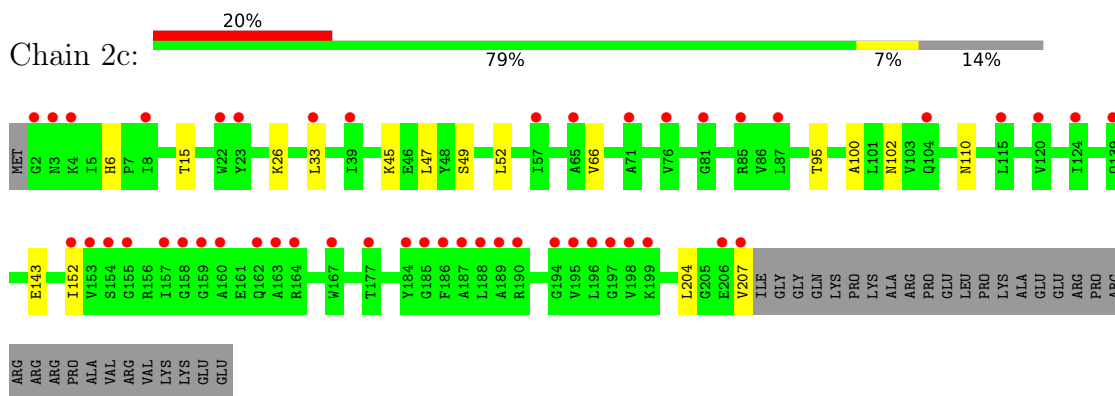
• Molecule 33: 30S ribosomal protein S2



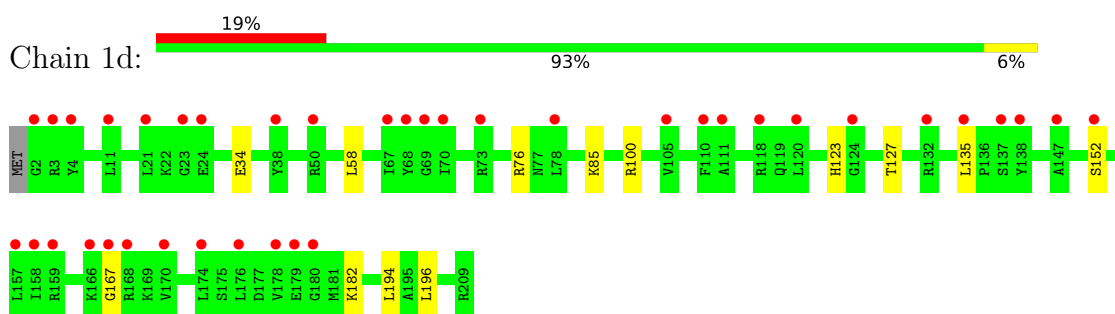
• Molecule 34: 30S ribosomal protein S3



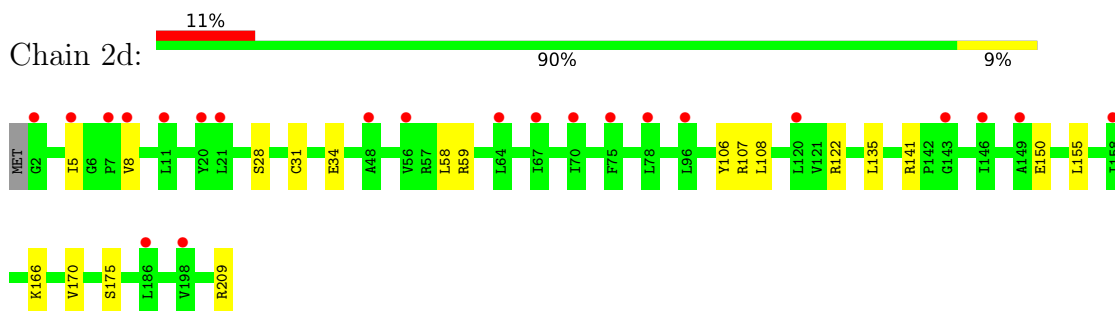
- Molecule 34: 30S ribosomal protein S3



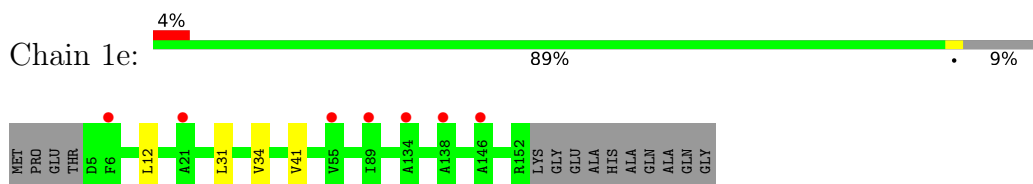
- Molecule 35: 30S ribosomal protein S4



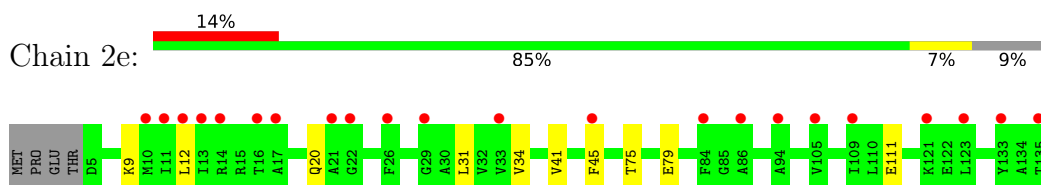
- Molecule 35: 30S ribosomal protein S4



- Molecule 36: 30S ribosomal protein S5



- Molecule 36: 30S ribosomal protein S5



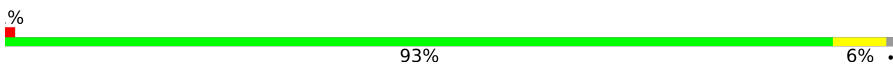
LYS
GLY
GLU
ALA
HIS
ALA
GLN
ALA
GLY

- Molecule 37: 30S ribosomal protein S6

Chain 1f:  94% 5%

M1 L21 V40 E69 W73 H100 ALA

- Molecule 37: 30S ribosomal protein S6

Chain 2f:  93% 6%

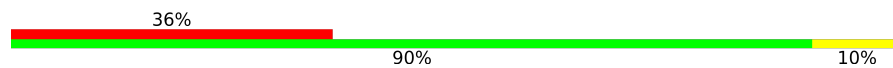
M1 L10 E69 L75 I81 K92 E95 F96 F97 H100 ALA

- Molecule 38: 30S ribosomal protein S7

Chain 1g:  94% 5% 3%

MET A2 R6 L12 D15 L16 K31 R32 D45 G55 Y85 L104 E113 K138 W156

- Molecule 38: 30S ribosomal protein S7

Chain 2g:  90% 10% 36%

MET A2 R3 R4 R5 R6 A7 E8 V9 R10 Q11 L12 L16 V21 L22 V23 T24 A25 F26 N28 M31 R32 D33 G34 K35 K36 A40 R41 I42 F43 Y44 I50 K53 T54 G55 F62 V66 V75 R76 S77 R78 R79 V80 G81 G82 A83 N84 Y85 Q86

V91 R94 R95 L99 A100 L101 W103 L104 V105 E113 R114 R115 A116 A117 V118 R119 L120 E123 G130 K131 A134 V135 K138 R148 A152 H154 Y154 R155 W156

- Molecule 39: 30S ribosomal protein S8

Chain 1h:  95% 11%

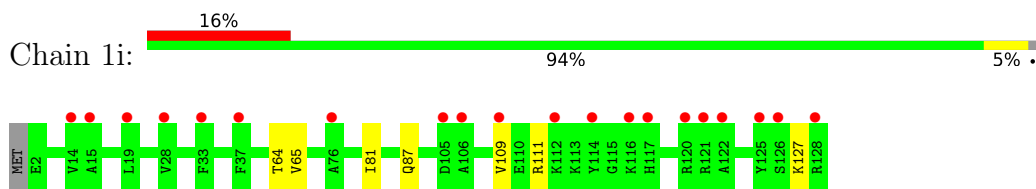
MET L2 V26 L38 L39 D52 V53 K56 P57 R58 L63 I86 V93 Y94 R98 R102 L107 L112 L133 I134 V137 W138

- Molecule 39: 30S ribosomal protein S8

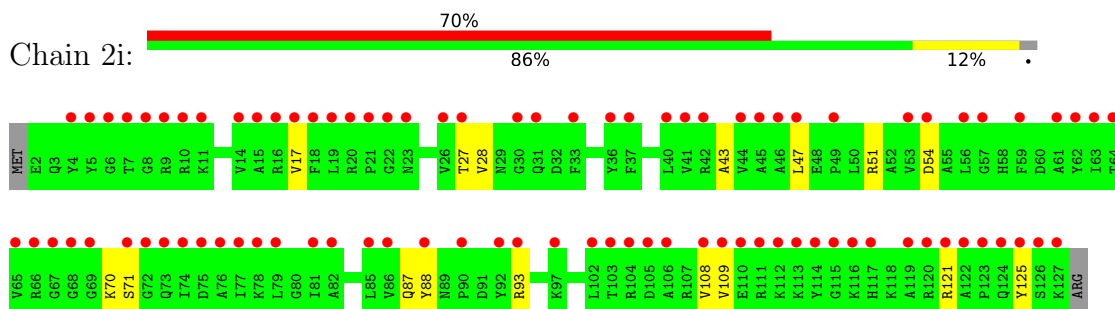
Chain 2h:  93% 8% 5%

MET L2 L36 R37 I38 I45 L63 R84 R85 I86 R91 R92 V93 Y94 V95 L112 S115 L119 R122 G131 E132 L133 I134 W138

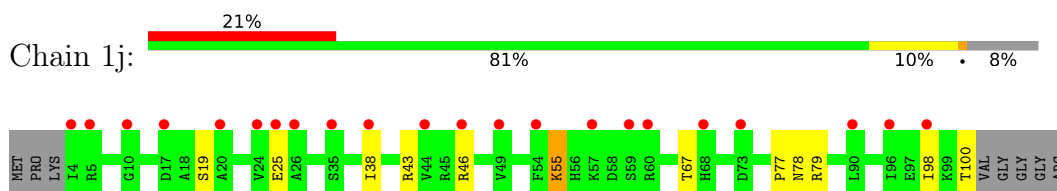
- Molecule 40: 30S ribosomal protein S9



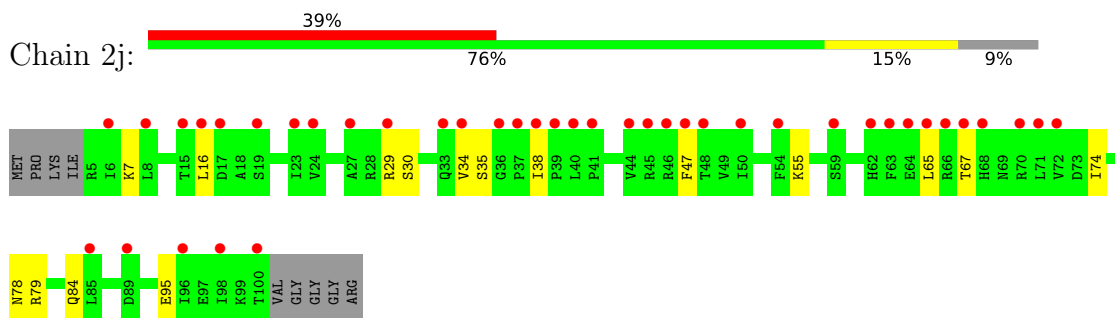
- Molecule 40: 30S ribosomal protein S9



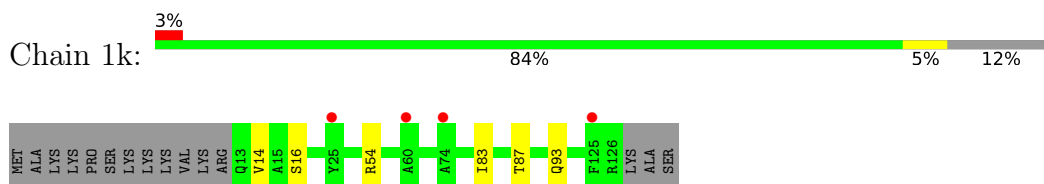
- Molecule 41: 30S ribosomal protein S10



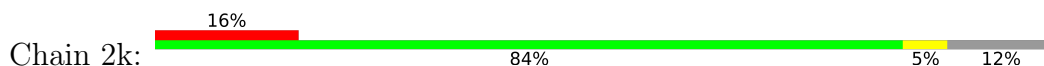
- Molecule 41: 30S ribosomal protein S10

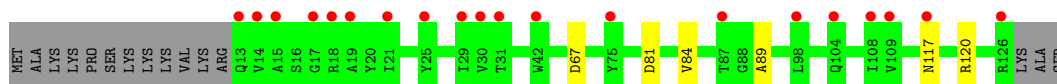


- Molecule 42: 30S ribosomal protein S11

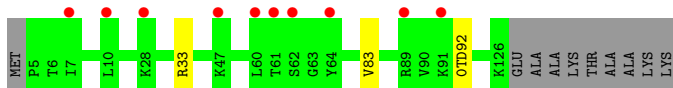
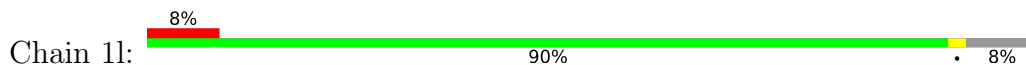


- Molecule 42: 30S ribosomal protein S11

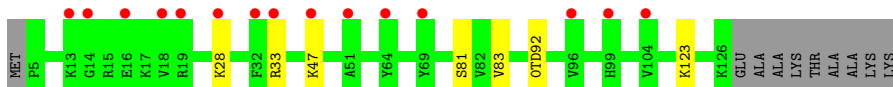
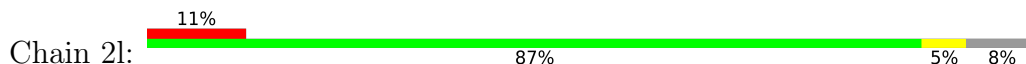




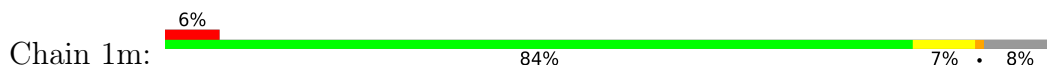
- Molecule 43: 30S ribosomal protein S12



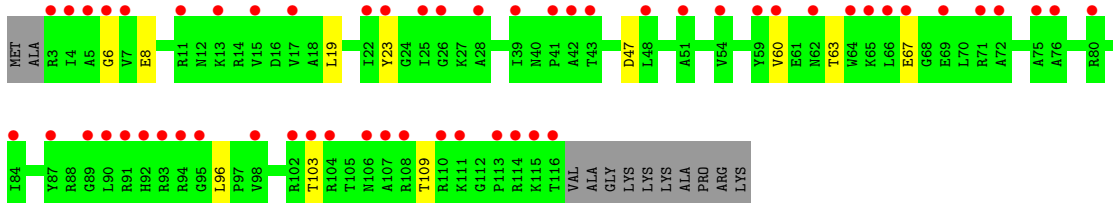
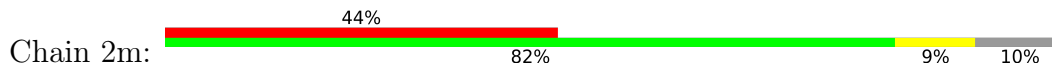
- Molecule 43: 30S ribosomal protein S12



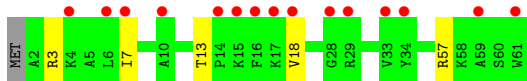
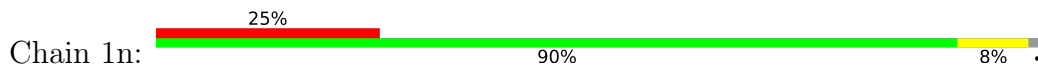
- Molecule 44: 30S ribosomal protein S13



- Molecule 44: 30S ribosomal protein S13

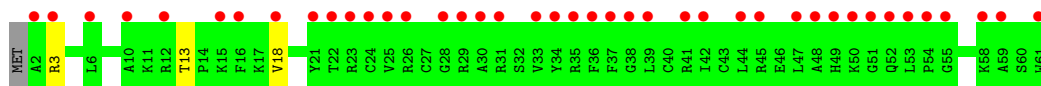


- Molecule 45: 30S ribosomal protein S14 type Z

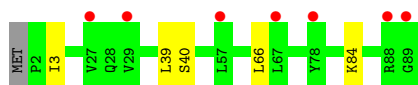
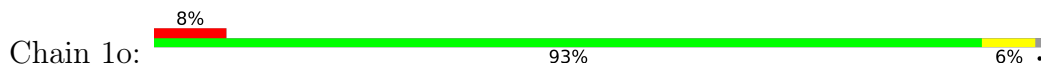


- Molecule 45: 30S ribosomal protein S14 type Z

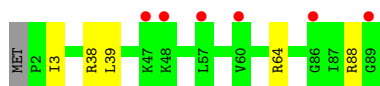




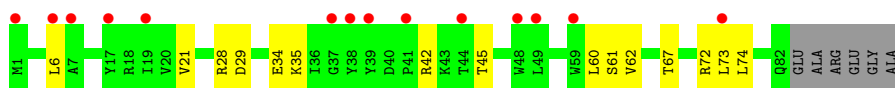
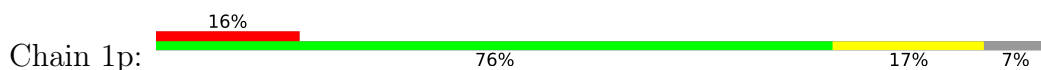
- Molecule 46: 30S ribosomal protein S15



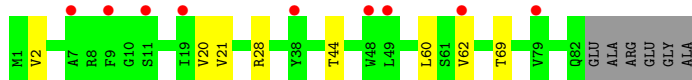
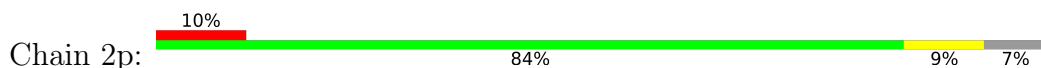
- Molecule 46: 30S ribosomal protein S15



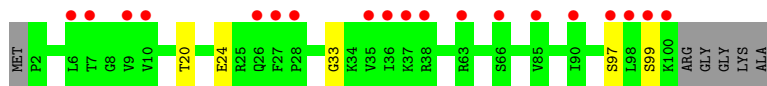
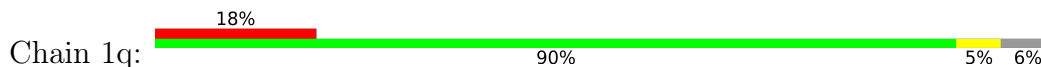
- Molecule 47: 30S ribosomal protein S16



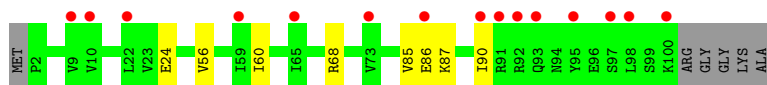
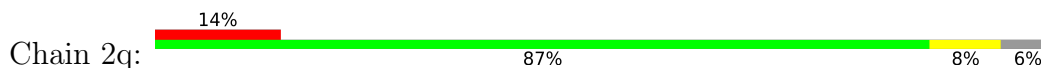
- Molecule 47: 30S ribosomal protein S16



- Molecule 48: 30S ribosomal protein S17

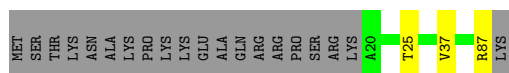


- Molecule 48: 30S ribosomal protein S17




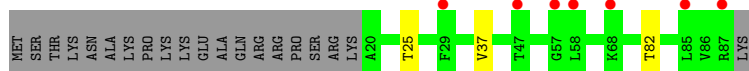
- Molecule 49: 30S ribosomal protein S18

Chain 1r: 




● Molecule 49: 30S ribosomal protein S18

Chain 2r: 




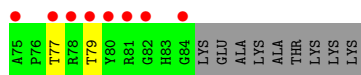
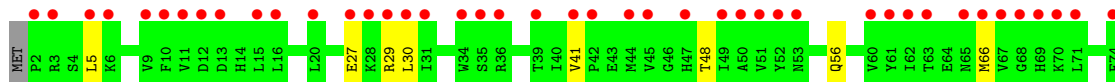
● Molecule 50: 30S ribosomal protein S19

Chain 1s: 




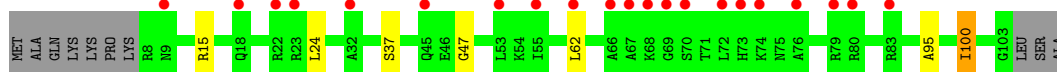
● Molecule 50: 30S ribosomal protein S19

Chain 2s: 




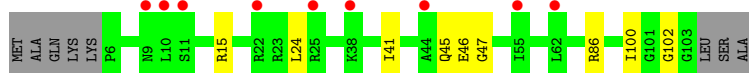
● Molecule 51: 30S ribosomal protein S20

Chain 1t: 




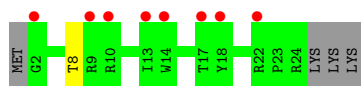
● Molecule 51: 30S ribosomal protein S20

Chain 2t: 

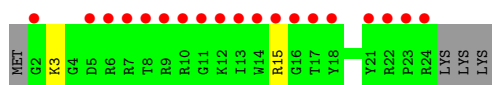
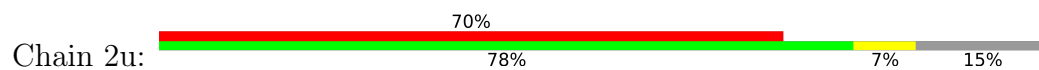


● Molecule 52: 30S ribosomal protein Thx

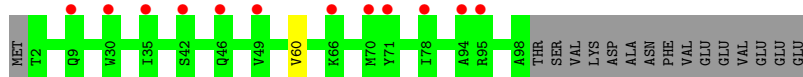
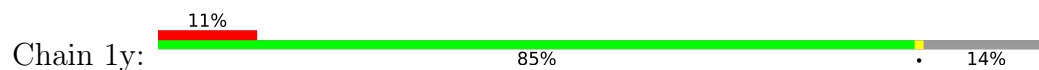
Chain 1u: 



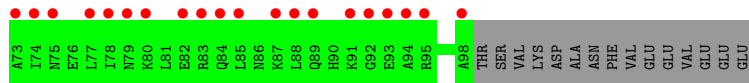
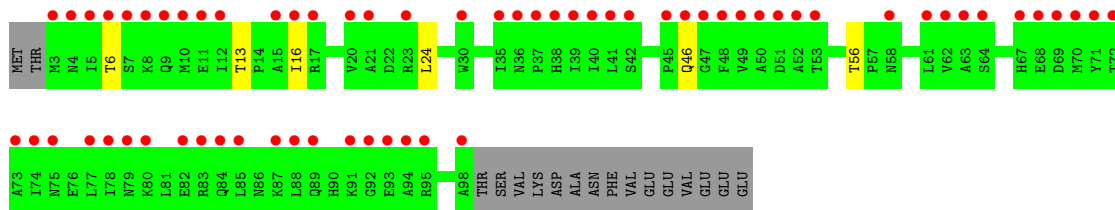
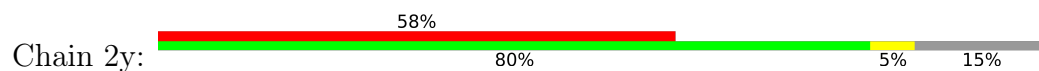
- Molecule 52: 30S ribosomal protein Thx



- Molecule 53: Ribosome-associated inhibitor A



- Molecule 53: Ribosome-associated inhibitor A



4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α , β , γ	208.57Å 448.58Å 617.47Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	151.65 – 2.50 224.29 – 2.50	Depositor EDS
% Data completeness (in resolution range)	99.9 (151.65-2.50) 99.9 (224.29-2.50)	Depositor EDS
R_{merge}	0.17	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.22 (at 2.52Å)	Xtrriage
Refinement program	PHENIX 1.8.2	Depositor
R, R_{free}	0.206 , 0.246 0.206 , 0.246	Depositor DCC
R_{free} test set	98630 reflections (5.02%)	wwPDB-VP
Wilson B-factor (Å ²)	57.6	Xtrriage
Anisotropy	0.189	Xtrriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.29 , 53.7	EDS
L-test for twinning ²	$\langle L \rangle = 0.46$, $\langle L^2 \rangle = 0.28$	Xtrriage
Estimated twinning fraction	No twinning to report.	Xtrriage
F_o, F_c correlation	0.93	EDS
Total number of atoms	296967	wwPDB-VP
Average B, all atoms (Å ²)	65.0	wwPDB-VP

Xtrriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.54% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

²Theoretical values of $\langle |L| \rangle$, $\langle L^2 \rangle$ for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.

5 Model quality

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: PSU, 2MU, 4OC, 2MG, M2G, OMG, 0TD, G7M, ERY, ZN, 5MC, HGR, SF4, MPD, 2MA, 5MU, MG, OMC, UR3, MA6

The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 5$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
1	1A	0.54	1/69030 (0.0%)	0.98	113/107750 (0.1%)
1	2A	0.42	3/68902 (0.0%)	0.89	68/107548 (0.1%)
2	1B	0.44	0/2876	0.92	2/4486 (0.0%)
2	2B	0.39	0/2878	0.86	0/4490
3	1D	0.37	0/2181	0.60	0/2940
3	2D	0.33	0/2186	0.53	0/2944
4	1E	0.34	0/1592	0.55	0/2149
4	2E	0.30	0/1592	0.51	0/2149
5	1F	0.33	0/1619	0.56	0/2193
5	2F	0.30	0/1615	0.52	0/2188
6	1G	0.30	0/1451	0.48	0/1961
6	2G	0.31	0/1449	0.49	0/1957
7	1H	0.33	0/1356	0.52	0/1834
7	2H	0.29	0/1350	0.47	0/1826
8	1I	0.28	0/1109	0.48	0/1512
8	2I	0.27	0/1091	0.48	0/1490
9	1N	0.35	0/1148	0.54	0/1547
9	2N	0.29	0/1144	0.46	0/1543
10	1O	0.36	0/943	0.55	0/1269
10	2O	0.33	0/943	0.53	0/1269
11	1P	0.35	0/1152	0.56	0/1533
11	2P	0.31	0/1152	0.51	0/1533
12	1Q	0.35	0/1143	0.53	0/1527
12	2Q	0.29	0/1143	0.49	0/1527
13	1R	0.34	0/982	0.56	0/1312
13	2R	0.29	0/982	0.51	0/1312
14	1S	0.31	0/887	0.52	0/1180
14	2S	0.30	0/880	0.49	0/1172
15	1T	0.33	0/1105	0.53	0/1477
15	2T	0.29	0/1097	0.50	0/1468
16	1U	0.37	0/977	0.55	0/1301

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
16	2U	0.29	0/977	0.45	0/1301
17	1V	0.37	0/786	0.55	0/1053
17	2V	0.31	0/782	0.52	0/1049
18	1W	0.36	0/897	0.53	0/1205
18	2W	0.31	0/897	0.50	0/1205
19	1X	0.37	0/764	0.54	0/1025
19	2X	0.31	0/764	0.51	0/1025
20	1Y	0.37	0/823	0.55	0/1099
20	2Y	0.31	0/823	0.52	0/1100
21	1Z	0.33	0/1620	0.50	0/2200
21	2Z	0.30	0/1590	0.49	0/2162
22	10	0.37	0/616	0.57	0/821
22	20	0.29	0/616	0.49	0/821
23	11	0.32	0/761	0.52	0/1013
23	21	0.32	0/766	0.50	0/1018
24	12	0.30	0/590	0.47	0/781
24	22	0.29	0/594	0.45	0/785
25	13	0.34	0/474	0.55	0/635
25	23	0.28	0/469	0.47	0/630
26	14	0.32	0/559	0.56	0/754
26	24	0.34	0/549	0.56	0/741
27	15	0.36	0/473	0.72	2/639 (0.3%)
27	25	0.35	0/469	0.52	0/635
28	16	0.34	0/460	0.56	0/613
28	26	0.30	0/456	0.48	0/608
29	17	0.36	0/426	0.52	0/561
29	27	0.30	0/426	0.51	0/561
30	18	0.33	0/525	0.55	0/691
30	28	0.29	0/525	0.48	0/691
31	19	0.40	0/310	0.54	0/407
31	29	0.29	0/310	0.51	0/407
32	1a	0.38	0/35795	0.86	9/55864 (0.0%)
32	2a	0.37	1/35890 (0.0%)	0.86	22/56012 (0.0%)
33	1b	0.29	0/1876	0.48	0/2533
33	2b	0.34	0/1860	0.50	1/2518 (0.0%)
34	1c	0.29	0/1582	0.47	0/2137
34	2c	0.30	0/1566	0.46	0/2119
35	1d	0.29	0/1695	0.48	0/2274
35	2d	0.28	0/1698	0.46	0/2277
36	1e	0.29	0/1149	0.52	0/1548
36	2e	0.29	0/1149	0.49	0/1548
37	1f	0.31	0/827	0.48	0/1120
37	2f	0.29	0/829	0.48	0/1123

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
38	1g	0.29	0/1254	0.42	0/1683
38	2g	0.29	0/1248	0.42	0/1676
39	1h	0.28	0/1118	0.48	0/1506
39	2h	0.28	0/1108	0.47	0/1494
40	1i	0.30	0/1005	0.48	0/1351
40	2i	0.31	0/985	0.47	0/1329
41	1j	0.31	0/732	0.48	0/993
41	2j	0.29	0/723	0.46	0/984
42	1k	0.30	0/849	0.50	0/1150
42	2k	0.29	0/848	0.50	0/1149
43	1l	0.30	0/937	0.50	0/1260
43	2l	0.28	0/937	0.50	0/1260
44	1m	0.28	0/924	0.48	0/1242
44	2m	0.29	0/905	0.48	0/1217
45	1n	0.31	0/501	0.48	0/664
45	2n	0.29	0/501	0.46	0/664
46	1o	0.28	0/739	0.46	0/985
46	2o	0.27	0/739	0.45	0/985
47	1p	0.28	0/697	0.52	0/939
47	2p	0.28	0/693	0.51	0/935
48	1q	0.29	0/836	0.50	0/1117
48	2q	0.31	0/836	0.47	0/1117
49	1r	0.28	0/560	0.50	0/746
49	2r	0.29	0/560	0.45	0/746
50	1s	0.27	0/663	0.50	0/895
50	2s	0.30	0/660	0.53	0/893
51	1t	0.28	0/734	0.44	0/969
51	2t	0.27	0/736	0.42	0/976
52	1u	0.27	0/203	0.50	0/266
52	2u	0.31	0/203	0.49	0/266
53	1y	0.28	0/776	0.48	0/1048
53	2y	0.28	0/761	0.46	0/1030
All	All	0.41	5/309939 (0.0%)	0.82	217/463231 (0.0%)

Chiral center outliers are detected by calculating the chiral volume of a chiral center and verifying if the center is modelled as a planar moiety or with the opposite hand. A planarity outlier is detected by checking planarity of atoms in a peptide group, atoms in a mainchain group or atoms of a sidechain that are expected to be planar.

Mol	Chain	#Chirality outliers	#Planarity outliers
26	14	0	1
26	24	0	1

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Mol	Chain	#Chirality outliers	#Planarity outliers
33	1b	0	1
All	All	0	3

All (5) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	2A	2104	G	N1-C2	-6.92	1.32	1.37
1	2A	2185	C	N3-C4	-5.96	1.29	1.33
1	1A	330	A	N9-C4	-5.87	1.34	1.37
32	2a	1003	G	N9-C4	5.35	1.42	1.38
1	2A	2104	G	C6-N1	-5.08	1.35	1.39

All (217) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2A	2185	C	N1-C2-O2	19.62	130.67	118.90
1	2A	2104	G	N3-C2-N2	16.63	131.54	119.90
1	2A	2104	G	C5-C6-O6	15.74	138.04	128.60
1	2A	2104	G	N1-C2-N2	-13.53	104.02	116.20
1	2A	2185	C	C2-N3-C4	12.98	126.39	119.90
1	2A	2104	G	C6-N1-C2	11.84	132.20	125.10
1	1A	1042	G	OP1-P-O3'	-10.90	81.21	105.20
1	2A	570	G	C5-C6-O6	-10.19	122.49	128.60
1	1A	512	G	O4'-C1'-N9	10.18	116.34	108.20
1	2A	2104	G	C5-C6-N1	-10.16	106.42	111.50
1	1A	2682	U	O5'-P-OP2	-9.88	96.81	105.70
1	2A	1648	C	O5'-P-OP1	-9.85	96.84	105.70
1	2A	1092	C	N1-C2-O2	9.77	124.76	118.90
1	2A	2185	C	C5-C6-N1	9.74	125.87	121.00
1	2A	2185	C	N3-C2-O2	-9.42	115.31	121.90
1	2A	2185	C	N3-C4-N4	-9.39	111.43	118.00
1	1A	1075	C	N1-C2-O2	9.35	124.51	118.90
1	1A	330	A	C2-N3-C4	-9.19	106.01	110.60
1	2A	2185	C	C4-C5-C6	-9.14	112.83	117.40
1	1A	570	G	C5-C6-O6	-8.89	123.27	128.60
32	2a	1003	G	N3-C4-C5	-8.82	124.19	128.60
1	1A	801	G	O5'-P-OP2	-8.72	97.85	105.70
1	1A	2589	A	O5'-P-OP1	-8.69	97.88	105.70
1	1A	1395	A	O5'-P-OP1	-8.45	98.10	105.70
1	2A	2185	C	C5-C4-N4	8.43	126.10	120.20
1	2A	512	G	O4'-C1'-N9	8.33	114.86	108.20
1	1A	1352	U	O5'-P-OP1	-8.32	98.21	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2A	1092	C	C2-N1-C1'	8.29	127.92	118.80
32	2a	1004	A	O4'-C1'-N9	8.29	114.83	108.20
1	1A	1042	G	OP2-P-O3'	-8.21	87.13	105.20
1	1A	588	U	O5'-P-OP2	-8.12	98.39	105.70
1	1A	576	U	O5'-P-OP1	-8.10	98.41	105.70
1	1A	330	A	N1-C2-N3	7.99	133.30	129.30
1	2A	1092	C	N3-C2-O2	-7.89	116.38	121.90
1	1A	1086	A	N1-C6-N6	-7.87	113.88	118.60
27	15	58	LEU	CA-CB-CG	7.78	133.19	115.30
1	1A	2036	C	O5'-P-OP1	-7.74	98.73	105.70
32	2a	1003	G	N3-C4-N9	7.68	130.61	126.00
1	2A	1092	C	C6-N1-C2	-7.58	117.27	120.30
1	1A	999	U	O5'-P-OP2	-7.54	98.91	105.70
1	1A	1075	C	C2-N3-C4	7.42	123.61	119.90
1	2A	2185	C	N1-C2-N3	-7.40	114.02	119.20
1	2A	570	G	C4-C5-N7	7.39	113.76	110.80
1	2A	1614	A	O5'-P-OP1	-7.38	99.05	105.70
1	1A	2419	U	N3-C4-O4	-7.33	114.27	119.40
1	2A	2104	G	N1-C6-O6	-7.30	115.52	119.90
1	1A	845	G	O4'-C1'-N9	7.26	114.01	108.20
1	1A	2577	A	O5'-P-OP1	-7.26	99.16	105.70
1	2A	948	G	O5'-P-OP1	-7.24	99.19	105.70
1	2A	570	G	N1-C6-O6	7.20	124.22	119.90
1	1A	2685	G	N1-C6-O6	-7.16	115.61	119.90
1	2A	787	U	O5'-P-OP1	-7.10	99.31	105.70
1	1A	2023	G	O5'-P-OP1	-7.09	99.32	105.70
32	2a	266	G	P-O3'-C3'	7.08	128.19	119.70
1	1A	570	G	C5-C6-N1	7.07	115.03	111.50
1	1A	2848	G	O4'-C1'-N9	7.04	113.83	108.20
1	1A	1176	G	OP1-P-O3'	6.96	120.52	105.20
1	1A	740	U	O5'-P-OP2	-6.93	99.47	105.70
1	2A	570	G	N9-C4-C5	-6.90	102.64	105.40
1	1A	645	C	C2-N1-C1'	6.89	126.38	118.80
32	2a	1378	C	C2-N1-C1'	6.87	126.36	118.80
1	1A	12	U	C2-N1-C1'	6.81	125.88	117.70
1	2A	2104	G	C2-N3-C4	-6.80	108.50	111.90
1	2A	2103	C	C2-N3-C4	6.74	123.27	119.90
1	1A	1043	C	OP1-P-OP2	6.70	129.65	119.60
1	1A	1602	U	N3-C4-O4	-6.69	114.72	119.40
32	2a	754	C	C2-N1-C1'	6.65	126.11	118.80
1	1A	1372	U	N3-C4-O4	6.61	124.03	119.40
1	2A	1060	U	C2-N1-C1'	6.55	125.56	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
33	2b	232	PRO	C-N-CA	6.53	138.01	121.70
1	1A	645	C	N1-C2-O2	6.49	122.80	118.90
1	1A	1300	U	P-O3'-C3'	6.47	127.47	119.70
1	1A	2269	A	O5'-P-OP1	-6.47	99.88	105.70
1	2A	12	U	N3-C2-O2	-6.45	117.68	122.20
1	1A	785	G	O5'-P-OP2	-6.43	99.91	105.70
1	1A	2447	G	C8-N9-C4	6.40	108.96	106.40
1	1A	2319	G	O4'-C1'-N9	6.37	113.29	108.20
32	1a	299	G	C5-C6-O6	-6.36	124.78	128.60
32	2a	1378	C	N1-C2-O2	6.36	122.71	118.90
1	1A	1187	G	N1-C6-O6	-6.32	116.11	119.90
1	2A	1076	C	OP1-P-O3'	6.28	119.01	105.20
1	2A	2186	G	C5-C6-O6	6.23	132.34	128.60
1	1A	226	G	O4'-C1'-N9	6.21	113.17	108.20
27	15	25	LEU	C-N-CA	-6.20	106.19	121.70
1	1A	2593	U	N3-C4-O4	-6.20	115.06	119.40
1	1A	2249	U	N3-C4-O4	-6.17	115.08	119.40
1	1A	271(Y)	U	O4'-C1'-N1	6.06	113.05	108.20
32	2a	254	G	O5'-P-OP1	-6.06	100.25	105.70
1	1A	1253	A	C8-N9-C4	6.01	108.20	105.80
1	2A	12	U	N1-C2-O2	5.95	126.97	122.80
1	1A	2419	U	N1-C2-O2	5.93	126.95	122.80
1	2A	2103	C	C5-C4-N4	5.87	124.31	120.20
1	1A	383	U	O4'-C1'-N1	5.86	112.89	108.20
1	1A	372	G	O4'-C1'-N9	5.85	112.88	108.20
1	2A	31	C	O5'-P-OP1	-5.84	100.44	105.70
32	2a	1003	G	C4-N9-C1'	5.83	134.08	126.50
1	1A	774	A	C8-N9-C4	-5.81	103.47	105.80
1	2A	1092	C	C5-C6-N1	5.81	123.91	121.00
1	2A	2036	C	O5'-P-OP1	-5.79	100.49	105.70
1	2A	205	G	O5'-P-OP2	-5.78	100.50	105.70
1	2A	2249	U	N3-C4-O4	-5.77	115.36	119.40
1	2A	752	A	P-O3'-C3'	5.74	126.58	119.70
1	1A	1177	A	O5'-P-OP1	-5.73	100.55	105.70
1	1A	2419	U	N3-C2-O2	-5.73	118.19	122.20
1	1A	966	G	N1-C6-O6	-5.72	116.47	119.90
1	1A	1653	G	C8-N9-C4	-5.72	104.11	106.40
1	1A	1210	A	P-O3'-C3'	5.70	126.54	119.70
1	2A	2689	U	N3-C2-O2	-5.68	118.22	122.20
1	2A	2185	C	C2-N1-C1'	5.67	125.04	118.80
32	1a	1137	C	C6-N1-C2	-5.67	118.03	120.30
32	2a	115	G	P-O3'-C3'	5.66	126.49	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1A	1064	C	N1-C2-O2	5.66	122.30	118.90
1	1A	1075	C	N3-C2-O2	-5.64	117.95	121.90
1	1A	1253	A	N7-C8-N9	-5.63	110.98	113.80
32	2a	687	A	P-O3'-C3'	5.63	126.46	119.70
1	1A	1372	U	C5-C4-O4	-5.63	122.52	125.90
1	2A	1313	U	C2-N1-C1'	5.63	124.45	117.70
1	1A	573	G	C5-C6-O6	-5.62	125.23	128.60
1	2A	576	U	O5'-P-OP1	-5.62	100.64	105.70
32	2a	1054	C	N1-C2-O2	5.61	122.27	118.90
1	1A	1372	U	C2-N1-C1'	5.59	124.41	117.70
2	1B	41	U	C5-C6-N1	-5.58	119.91	122.70
1	2A	1075	C	N1-C2-O2	5.58	122.25	118.90
1	2A	570	G	C6-C5-N7	-5.57	127.06	130.40
1	1A	615	G	O5'-P-OP2	-5.57	100.69	105.70
1	2A	1065	U	P-O3'-C3'	5.56	126.37	119.70
32	1a	754	C	N1-C2-O2	5.54	122.22	118.90
1	2A	120	U	O5'-P-OP1	-5.51	100.74	105.70
1	1A	1220	A	O5'-P-OP2	-5.50	100.75	105.70
1	1A	1416	G	O4'-C1'-N9	5.50	112.60	108.20
1	1A	1075	C	C2-N1-C1'	5.49	124.84	118.80
32	2a	79	G	C5-C6-O6	5.44	131.87	128.60
32	2a	266	G	OP2-P-O3'	5.44	117.16	105.20
1	1A	527	C	N1-C2-O2	-5.43	115.64	118.90
1	2A	2105	C	C5-C6-N1	5.41	123.71	121.00
1	1A	2061	G	O5'-P-OP2	-5.41	100.83	105.70
1	1A	568	U	N3-C4-C5	5.40	117.84	114.60
1	1A	1108	U	N1-C2-O2	-5.37	119.04	122.80
1	2A	2104	G	C8-N9-C1'	-5.36	120.04	127.00
32	2a	1003	G	C2-N3-C4	5.36	114.58	111.90
1	1A	1647	G	O4'-C1'-N9	-5.34	103.93	108.20
1	1A	195	A	P-O3'-C3'	5.33	126.10	119.70
1	2A	2602	A	P-O3'-C3'	5.32	126.09	119.70
1	1A	330	A	N3-C4-N9	-5.32	123.14	127.40
1	2A	1060	U	N1-C2-O2	5.31	126.52	122.80
1	1A	198	C	O5'-P-OP2	-5.31	100.92	105.70
1	1A	1784	A	O5'-P-OP2	-5.31	100.92	105.70
32	2a	1378	C	N3-C2-O2	-5.31	118.18	121.90
1	1A	614	U	N3-C2-O2	-5.31	118.48	122.20
32	2a	1286	A	N7-C8-N9	5.31	116.45	113.80
1	1A	2689	U	P-O3'-C3'	5.29	126.05	119.70
1	2A	748	G	C4-N9-C1'	-5.28	119.64	126.50
1	1A	570	G	N9-C4-C5	-5.28	103.29	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	2a	1225	A	C5-C6-N6	5.27	127.92	123.70
1	1A	949	C	N1-C2-O2	-5.27	115.74	118.90
32	2a	65	U	P-O3'-C3'	5.26	126.01	119.70
1	1A	2790	A	C3'-C2'-C1'	-5.24	97.31	101.50
1	1A	1936	A	O4'-C1'-N9	5.23	112.39	108.20
1	2A	2104	G	C4-N9-C1'	5.23	133.30	126.50
1	1A	1176	G	P-O3'-C3'	5.23	125.97	119.70
1	1A	565	C	C6-N1-C2	-5.22	118.21	120.30
32	2a	1065	U	P-O3'-C3'	5.21	125.95	119.70
1	2A	845	G	O4'-C1'-N9	5.20	112.36	108.20
1	1A	746	A	O4'-C1'-N9	5.20	112.36	108.20
32	1a	266	G	P-O3'-C3'	5.19	125.93	119.70
1	1A	1075	C	C5-C6-N1	5.19	123.59	121.00
1	2A	624	C	O5'-P-OP1	-5.19	101.03	105.70
1	1A	1104	C	C5-C4-N4	5.18	123.83	120.20
1	1A	2492	U	O5'-P-OP1	-5.18	101.04	105.70
1	2A	2287	A	O4'-C1'-N9	5.18	112.34	108.20
1	1A	2153	G	C4-N9-C1'	-5.17	119.77	126.50
1	1A	1385	G	O4'-C1'-N9	5.16	112.33	108.20
1	2A	1082	U	C2-N1-C1'	5.16	123.89	117.70
1	2A	746	A	O4'-C1'-N9	5.15	112.32	108.20
1	2A	1992	G	P-O3'-C3'	5.15	125.88	119.70
1	1A	2137	C	C6-N1-C2	-5.15	118.24	120.30
1	1A	1175	U	P-O3'-C3'	5.14	125.87	119.70
1	1A	1173	G	O4'-C1'-N9	5.14	112.31	108.20
2	1B	1	U	C2-N1-C1'	5.14	123.87	117.70
1	1A	1026	U	N1-C2-O2	5.12	126.39	122.80
32	1a	353	A	OP2-P-O3'	5.12	116.47	105.20
32	1a	1442	G	N3-C4-C5	-5.12	126.04	128.60
1	1A	1104	C	N3-C4-N4	-5.12	114.42	118.00
1	2A	1647	G	O4'-C1'-N9	-5.12	104.11	108.20
1	1A	570	G	C4-C5-N7	5.11	112.84	110.80
1	1A	645	C	C6-N1-C1'	-5.11	114.67	120.80
32	1a	687	A	P-O3'-C3'	5.11	125.83	119.70
1	2A	740	U	O5'-P-OP2	-5.11	101.11	105.70
1	1A	575	A	O5'-P-OP1	-5.10	101.11	105.70
1	1A	847	U	C2-N1-C1'	5.10	123.82	117.70
1	2A	1776	G	O5'-P-OP2	-5.10	101.11	105.70
1	1A	704	G	O4'-C1'-N9	5.10	112.28	108.20
1	1A	1070	A	O4'-C1'-N9	5.09	112.28	108.20
1	1A	2447	G	N7-C8-N9	-5.09	110.55	113.10
1	1A	2103	C	N1-C2-O2	5.09	121.95	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1A	674	G	C5-C6-O6	-5.09	125.55	128.60
1	1A	800	A	O5'-P-OP1	-5.09	101.12	105.70
32	1a	1201	A	P-O3'-C3'	5.09	125.81	119.70
1	2A	570	G	N3-C4-N9	5.08	129.05	126.00
32	2a	560	U	C2-N1-C1'	5.08	123.80	117.70
1	1A	2153	G	N3-C4-N9	-5.08	122.95	126.00
1	1A	383	U	C2-N1-C1'	-5.08	111.61	117.70
1	1A	2248	C	O5'-P-OP2	-5.08	101.13	105.70
1	1A	1063	G	C5-C6-O6	5.07	131.64	128.60
32	2a	1036	G	C4-N9-C1'	5.07	133.09	126.50
1	1A	792	G	O4'-C1'-N9	-5.07	104.15	108.20
1	2A	2172	U	P-O3'-C3'	5.06	125.77	119.70
1	2A	2689	U	P-O3'-C3'	5.06	125.77	119.70
1	1A	530	G	OP1-P-O3'	5.06	116.33	105.20
1	1A	139(A)	G	C5-N7-C8	5.04	106.82	104.30
1	1A	2789	C	O4'-C1'-N1	5.04	112.23	108.20
1	1A	568	U	C5-C4-O4	-5.04	122.88	125.90
1	1A	1272	A	O5'-P-OP2	-5.02	101.18	105.70
1	1A	1063	G	C6-N1-C2	5.02	128.11	125.10
32	1a	839	U	OP1-P-O3'	5.01	116.21	105.20
1	2A	1092	C	C6-N1-C1'	-5.01	114.79	120.80
1	1A	2073	C	OP2-P-O3'	5.00	116.21	105.20

There are no chirality outliers.

All (3) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
26	14	67	TYR	Peptide
33	1b	231	GLU	Peptide
26	24	18	CYS	Peptide

5.2 Too-close contacts [i](#)

Due to software issues we are unable to calculate clashes - this section is therefore empty.

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries

of similar resolution.

The Analysed column shows the number of residues for which the backbone conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
3	1D	273/276 (99%)	258 (94%)	14 (5%)	1 (0%)	34	54
3	2D	273/276 (99%)	257 (94%)	15 (6%)	1 (0%)	34	54
4	1E	202/206 (98%)	191 (95%)	9 (4%)	2 (1%)	15	28
4	2E	202/206 (98%)	192 (95%)	8 (4%)	2 (1%)	15	28
5	1F	201/210 (96%)	197 (98%)	3 (2%)	1 (0%)	29	48
5	2F	201/210 (96%)	190 (94%)	10 (5%)	1 (0%)	29	48
6	1G	179/182 (98%)	163 (91%)	12 (7%)	4 (2%)	6	10
6	2G	179/182 (98%)	149 (83%)	26 (14%)	4 (2%)	6	10
7	1H	172/180 (96%)	161 (94%)	10 (6%)	1 (1%)	25	43
7	2H	171/180 (95%)	148 (86%)	23 (14%)	0	100	100
8	1I	145/148 (98%)	128 (88%)	16 (11%)	1 (1%)	22	39
8	2I	144/148 (97%)	130 (90%)	13 (9%)	1 (1%)	22	39
9	1N	138/140 (99%)	133 (96%)	5 (4%)	0	100	100
9	2N	138/140 (99%)	134 (97%)	4 (3%)	0	100	100
10	1O	120/122 (98%)	113 (94%)	6 (5%)	1 (1%)	19	35
10	2O	120/122 (98%)	112 (93%)	7 (6%)	1 (1%)	19	35
11	1P	147/150 (98%)	141 (96%)	6 (4%)	0	100	100
11	2P	147/150 (98%)	140 (95%)	6 (4%)	1 (1%)	22	39
12	1Q	139/141 (99%)	134 (96%)	4 (3%)	1 (1%)	22	39
12	2Q	139/141 (99%)	130 (94%)	9 (6%)	0	100	100
13	1R	116/118 (98%)	114 (98%)	2 (2%)	0	100	100
13	2R	116/118 (98%)	113 (97%)	3 (3%)	0	100	100
14	1S	108/112 (96%)	102 (94%)	5 (5%)	1 (1%)	17	31
14	2S	108/112 (96%)	96 (89%)	11 (10%)	1 (1%)	17	31
15	1T	129/146 (88%)	120 (93%)	8 (6%)	1 (1%)	19	35
15	2T	129/146 (88%)	122 (95%)	7 (5%)	0	100	100
16	1U	114/118 (97%)	114 (100%)	0	0	100	100
16	2U	114/118 (97%)	114 (100%)	0	0	100	100
17	1V	99/101 (98%)	95 (96%)	2 (2%)	2 (2%)	7	12

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
17	2V	99/101 (98%)	95 (96%)	3 (3%)	1 (1%)	15	28
18	1W	110/113 (97%)	110 (100%)	0	0	100	100
18	2W	110/113 (97%)	108 (98%)	2 (2%)	0	100	100
19	1X	93/96 (97%)	90 (97%)	2 (2%)	1 (1%)	14	26
19	2X	93/96 (97%)	87 (94%)	5 (5%)	1 (1%)	14	26
20	1Y	105/110 (96%)	95 (90%)	10 (10%)	0	100	100
20	2Y	105/110 (96%)	99 (94%)	6 (6%)	0	100	100
21	1Z	201/206 (98%)	186 (92%)	14 (7%)	1 (0%)	29	48
21	2Z	199/206 (97%)	177 (89%)	20 (10%)	2 (1%)	15	28
22	10	75/85 (88%)	71 (95%)	4 (5%)	0	100	100
22	20	75/85 (88%)	71 (95%)	4 (5%)	0	100	100
23	11	95/98 (97%)	93 (98%)	1 (1%)	1 (1%)	14	26
23	21	95/98 (97%)	93 (98%)	1 (1%)	1 (1%)	14	26
24	12	68/72 (94%)	67 (98%)	1 (2%)	0	100	100
24	22	68/72 (94%)	64 (94%)	4 (6%)	0	100	100
25	13	57/60 (95%)	56 (98%)	1 (2%)	0	100	100
25	23	57/60 (95%)	54 (95%)	3 (5%)	0	100	100
26	14	67/71 (94%)	53 (79%)	10 (15%)	4 (6%)	1	1
26	24	67/71 (94%)	45 (67%)	15 (22%)	7 (10%)	0	0
27	15	57/60 (95%)	57 (100%)	0	0	100	100
27	25	57/60 (95%)	54 (95%)	2 (4%)	1 (2%)	8	14
28	16	51/54 (94%)	49 (96%)	2 (4%)	0	100	100
28	26	51/54 (94%)	46 (90%)	5 (10%)	0	100	100
29	17	46/49 (94%)	46 (100%)	0	0	100	100
29	27	46/49 (94%)	46 (100%)	0	0	100	100
30	18	62/65 (95%)	62 (100%)	0	0	100	100
30	28	62/65 (95%)	61 (98%)	1 (2%)	0	100	100
31	19	35/37 (95%)	35 (100%)	0	0	100	100
31	29	35/37 (95%)	33 (94%)	2 (6%)	0	100	100
33	1b	229/256 (90%)	193 (84%)	28 (12%)	8 (4%)	3	4
33	2b	229/256 (90%)	191 (83%)	32 (14%)	6 (3%)	5	8

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
34	1c	204/239 (85%)	188 (92%)	15 (7%)	1 (0%)	29	48
34	2c	204/239 (85%)	176 (86%)	26 (13%)	2 (1%)	15	28
35	1d	206/209 (99%)	188 (91%)	17 (8%)	1 (0%)	29	48
35	2d	206/209 (99%)	197 (96%)	9 (4%)	0	100	100
36	1e	146/162 (90%)	137 (94%)	9 (6%)	0	100	100
36	2e	146/162 (90%)	138 (94%)	8 (6%)	0	100	100
37	1f	98/101 (97%)	93 (95%)	4 (4%)	1 (1%)	15	28
37	2f	98/101 (97%)	93 (95%)	5 (5%)	0	100	100
38	1g	153/156 (98%)	148 (97%)	4 (3%)	1 (1%)	22	39
38	2g	153/156 (98%)	142 (93%)	9 (6%)	2 (1%)	12	21
39	1h	135/138 (98%)	129 (96%)	6 (4%)	0	100	100
39	2h	135/138 (98%)	124 (92%)	10 (7%)	1 (1%)	22	39
40	1i	125/128 (98%)	113 (90%)	11 (9%)	1 (1%)	19	35
40	2i	124/128 (97%)	107 (86%)	14 (11%)	3 (2%)	6	9
41	1j	95/105 (90%)	78 (82%)	13 (14%)	4 (4%)	3	3
41	2j	94/105 (90%)	80 (85%)	10 (11%)	4 (4%)	2	3
42	1k	112/129 (87%)	104 (93%)	8 (7%)	0	100	100
42	2k	112/129 (87%)	100 (89%)	11 (10%)	1 (1%)	17	31
43	1l	119/132 (90%)	115 (97%)	4 (3%)	0	100	100
43	2l	119/132 (90%)	112 (94%)	7 (6%)	0	100	100
44	1m	114/126 (90%)	103 (90%)	7 (6%)	4 (4%)	3	4
44	2m	112/126 (89%)	100 (89%)	8 (7%)	4 (4%)	3	4
45	1n	58/61 (95%)	56 (97%)	2 (3%)	0	100	100
45	2n	58/61 (95%)	56 (97%)	2 (3%)	0	100	100
46	1o	86/89 (97%)	83 (96%)	3 (4%)	0	100	100
46	2o	86/89 (97%)	79 (92%)	6 (7%)	1 (1%)	13	24
47	1p	80/88 (91%)	70 (88%)	9 (11%)	1 (1%)	12	21
47	2p	80/88 (91%)	69 (86%)	10 (12%)	1 (1%)	12	21
48	1q	97/105 (92%)	87 (90%)	9 (9%)	1 (1%)	15	28
48	2q	97/105 (92%)	89 (92%)	7 (7%)	1 (1%)	15	28
49	1r	66/88 (75%)	63 (96%)	3 (4%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
49	2r	66/88 (75%)	64 (97%)	2 (3%)	0	100	100
50	1s	81/93 (87%)	69 (85%)	10 (12%)	2 (2%)	5	8
50	2s	81/93 (87%)	68 (84%)	11 (14%)	2 (2%)	5	8
51	1t	94/106 (89%)	87 (93%)	4 (4%)	3 (3%)	4	5
51	2t	96/106 (91%)	88 (92%)	5 (5%)	3 (3%)	4	5
52	1u	21/27 (78%)	21 (100%)	0	0	100	100
52	2u	21/27 (78%)	16 (76%)	4 (19%)	1 (5%)	2	2
53	1y	95/113 (84%)	95 (100%)	0	0	100	100
53	2y	94/113 (83%)	90 (96%)	4 (4%)	0	100	100
All	All	11629/12354 (94%)	10793 (93%)	728 (6%)	108 (1%)	17	31

All (108) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
4	1E	71	GLY
5	1F	130	ALA
6	1G	47	LYS
6	1G	50	ALA
26	14	49	PHE
41	1j	55	LYS
44	1m	3	ARG
51	1t	95	ALA
5	2F	130	ALA
6	2G	81	LYS
21	2Z	52	SER
33	2b	20	GLU
44	2m	67	GLU
3	1D	275	LYS
6	1G	51	ARG
21	1Z	52	SER
33	1b	8	LYS
33	1b	124	SER
38	1g	55	GLY
41	1j	79	ARG
51	1t	47	GLY
4	2E	71	GLY
8	2I	10	GLU
14	2S	96	GLY
17	2V	79	VAL

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Mol	Chain	Res	Type
19	2X	94	GLY
26	24	45	GLY
26	24	47	GLN
26	24	54	GLY
26	24	62	ARG
38	2g	55	GLY
40	2i	54	ASP
41	2j	35	SER
41	2j	55	LYS
41	2j	78	ASN
44	2m	8	GLU
4	1E	52	LEU
12	1Q	59	ARG
15	1T	127	ALA
26	14	57	GLU
33	1b	17	PHE
33	1b	20	GLU
33	1b	21	ARG
34	1c	3	ASN
41	1j	77	PRO
50	1s	27	GLU
51	1t	100	ILE
6	2G	78	SER
23	21	3	LYS
26	24	49	PHE
33	2b	17	PHE
33	2b	95	GLN
33	2b	125	PRO
34	2c	95	THR
38	2g	53	LYS
39	2h	133	LEU
40	2i	121	ARG
41	2j	79	ARG
42	2k	89	ALA
44	2m	6	GLY
47	2p	44	THR
50	2s	29	ARG
51	2t	100	ILE
52	2u	3	LYS
10	1O	5	GLN
17	1V	43	GLU
19	1X	94	GLY

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Mol	Chain	Res	Type
33	1b	125	PRO
41	1j	78	ASN
44	1m	12	ASN
44	1m	67	GLU
44	1m	106	ASN
47	1p	28	ARG
4	2E	52	LEU
6	2G	117	PHE
27	25	35	GLU
34	2c	100	ALA
40	2i	43	ALA
44	2m	23	TYR
48	2q	68	ARG
50	2s	30	LEU
51	2t	47	GLY
51	2t	102	GLY
14	1S	59	LYS
23	11	3	LYS
26	14	55	ARG
26	14	61	ARG
33	1b	16	HIS
3	2D	275	LYS
10	2O	5	GLN
11	2P	29	LYS
26	24	39	CYS
26	24	55	ARG
33	2b	16	HIS
8	1I	117	GLU
35	1d	167	GLY
46	2o	88	ARG
7	1H	92	ILE
17	1V	79	VAL
6	1G	44	GLY
33	1b	127	ILE
40	1i	109	VAL
50	1s	26	GLY
6	2G	109	VAL
33	2b	124	SER
48	1q	33	GLY
21	2Z	101	PRO
37	1f	40	VAL

5.3.2 Protein sidechains [i](#)

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution.

The Analysed column shows the number of residues for which the sidechain conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
3	1D	214/218 (98%)	197 (92%)	17 (8%)	12	24
3	2D	215/218 (99%)	202 (94%)	13 (6%)	19	37
4	1E	164/166 (99%)	156 (95%)	8 (5%)	25	47
4	2E	164/166 (99%)	154 (94%)	10 (6%)	18	36
5	1F	160/166 (96%)	144 (90%)	16 (10%)	7	15
5	2F	159/166 (96%)	140 (88%)	19 (12%)	5	10
6	1G	144/156 (92%)	134 (93%)	10 (7%)	15	30
6	2G	142/156 (91%)	131 (92%)	11 (8%)	13	25
7	1H	144/148 (97%)	136 (94%)	8 (6%)	21	40
7	2H	143/148 (97%)	127 (89%)	16 (11%)	6	11
8	1I	111/124 (90%)	99 (89%)	12 (11%)	6	12
8	2I	108/124 (87%)	100 (93%)	8 (7%)	13	27
9	1N	119/119 (100%)	109 (92%)	10 (8%)	11	21
9	2N	118/119 (99%)	110 (93%)	8 (7%)	16	30
10	1O	100/100 (100%)	98 (98%)	2 (2%)	55	79
10	2O	100/100 (100%)	98 (98%)	2 (2%)	55	79
11	1P	115/116 (99%)	110 (96%)	5 (4%)	29	53
11	2P	115/116 (99%)	110 (96%)	5 (4%)	29	53
12	1Q	111/111 (100%)	105 (95%)	6 (5%)	22	42
12	2Q	111/111 (100%)	99 (89%)	12 (11%)	6	12
13	1R	101/101 (100%)	93 (92%)	8 (8%)	12	24
13	2R	101/101 (100%)	95 (94%)	6 (6%)	19	37
14	1S	87/88 (99%)	80 (92%)	7 (8%)	12	23
14	2S	85/88 (97%)	75 (88%)	10 (12%)	5	10
15	1T	115/127 (91%)	104 (90%)	11 (10%)	8	16
15	2T	113/127 (89%)	106 (94%)	7 (6%)	18	35

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
16	1U	93/94 (99%)	87 (94%)	6 (6%)	17	33
16	2U	93/94 (99%)	88 (95%)	5 (5%)	22	42
17	1V	81/82 (99%)	76 (94%)	5 (6%)	18	35
17	2V	80/82 (98%)	74 (92%)	6 (8%)	13	26
18	1W	90/92 (98%)	84 (93%)	6 (7%)	16	31
18	2W	90/92 (98%)	80 (89%)	10 (11%)	6	11
19	1X	77/78 (99%)	74 (96%)	3 (4%)	32	57
19	2X	77/78 (99%)	73 (95%)	4 (5%)	23	44
20	1Y	86/91 (94%)	81 (94%)	5 (6%)	20	38
20	2Y	86/91 (94%)	79 (92%)	7 (8%)	11	23
21	1Z	169/179 (94%)	155 (92%)	14 (8%)	11	22
21	2Z	165/179 (92%)	155 (94%)	10 (6%)	18	36
22	10	61/67 (91%)	59 (97%)	2 (3%)	38	64
22	20	61/67 (91%)	57 (93%)	4 (7%)	16	32
23	11	79/83 (95%)	73 (92%)	6 (8%)	13	25
23	21	81/83 (98%)	77 (95%)	4 (5%)	25	47
24	12	65/67 (97%)	64 (98%)	1 (2%)	65	85
24	22	66/67 (98%)	57 (86%)	9 (14%)	3	7
25	13	51/52 (98%)	47 (92%)	4 (8%)	12	24
25	23	50/52 (96%)	47 (94%)	3 (6%)	19	37
26	14	58/63 (92%)	52 (90%)	6 (10%)	7	14
26	24	54/63 (86%)	46 (85%)	8 (15%)	3	5
27	15	51/52 (98%)	45 (88%)	6 (12%)	5	10
27	25	50/52 (96%)	48 (96%)	2 (4%)	31	56
28	16	51/52 (98%)	45 (88%)	6 (12%)	5	10
28	26	50/52 (96%)	45 (90%)	5 (10%)	7	15
29	17	41/42 (98%)	37 (90%)	4 (10%)	8	15
29	27	41/42 (98%)	38 (93%)	3 (7%)	14	27
30	18	54/55 (98%)	50 (93%)	4 (7%)	13	27
30	28	54/55 (98%)	51 (94%)	3 (6%)	21	40
31	19	34/34 (100%)	33 (97%)	1 (3%)	42	69

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
31	29	34/34 (100%)	32 (94%)	2 (6%)	19	37
33	1b	191/220 (87%)	171 (90%)	20 (10%)	7	13
33	2b	187/220 (85%)	164 (88%)	23 (12%)	4	9
34	1c	144/188 (77%)	136 (94%)	8 (6%)	21	40
34	2c	140/188 (74%)	125 (89%)	15 (11%)	6	13
35	1d	171/181 (94%)	159 (93%)	12 (7%)	15	29
35	2d	172/181 (95%)	153 (89%)	19 (11%)	6	12
36	1e	114/123 (93%)	110 (96%)	4 (4%)	36	62
36	2e	114/123 (93%)	103 (90%)	11 (10%)	8	16
37	1f	85/90 (94%)	81 (95%)	4 (5%)	26	49
37	2f	85/90 (94%)	79 (93%)	6 (7%)	14	28
38	1g	120/127 (94%)	113 (94%)	7 (6%)	20	38
38	2g	119/127 (94%)	106 (89%)	13 (11%)	6	12
39	1h	116/119 (98%)	110 (95%)	6 (5%)	23	44
39	2h	114/119 (96%)	106 (93%)	8 (7%)	15	29
40	1i	91/99 (92%)	85 (93%)	6 (7%)	16	32
40	2i	88/99 (89%)	75 (85%)	13 (15%)	3	5
41	1j	68/92 (74%)	59 (87%)	9 (13%)	4	7
41	2j	68/92 (74%)	56 (82%)	12 (18%)	2	3
42	1k	83/99 (84%)	77 (93%)	6 (7%)	14	28
42	2k	83/99 (84%)	78 (94%)	5 (6%)	19	37
43	1l	96/108 (89%)	94 (98%)	2 (2%)	53	78
43	2l	96/108 (89%)	90 (94%)	6 (6%)	18	34
44	1m	90/101 (89%)	83 (92%)	7 (8%)	12	24
44	2m	87/101 (86%)	80 (92%)	7 (8%)	12	23
45	1n	49/50 (98%)	44 (90%)	5 (10%)	7	14
45	2n	49/50 (98%)	46 (94%)	3 (6%)	18	36
46	1o	78/80 (98%)	73 (94%)	5 (6%)	17	33
46	2o	78/80 (98%)	74 (95%)	4 (5%)	24	45
47	1p	69/74 (93%)	55 (80%)	14 (20%)	1	2
47	2p	68/74 (92%)	61 (90%)	7 (10%)	7	14

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
48	1q	94/97 (97%)	90 (96%)	4 (4%)	29	53
48	2q	94/97 (97%)	87 (93%)	7 (7%)	13	27
49	1r	59/77 (77%)	56 (95%)	3 (5%)	24	45
49	2r	59/77 (77%)	56 (95%)	3 (5%)	24	45
50	1s	68/80 (85%)	63 (93%)	5 (7%)	13	27
50	2s	67/80 (84%)	59 (88%)	8 (12%)	5	10
51	1t	71/82 (87%)	66 (93%)	5 (7%)	15	29
51	2t	70/82 (85%)	64 (91%)	6 (9%)	10	20
52	1u	18/22 (82%)	17 (94%)	1 (6%)	21	40
52	2u	18/22 (82%)	17 (94%)	1 (6%)	21	40
53	1y	82/98 (84%)	81 (99%)	1 (1%)	71	88
53	2y	79/98 (81%)	73 (92%)	6 (8%)	13	25
All	All	9524/10260 (93%)	8796 (92%)	728 (8%)	13	25

All (728) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
3	1D	3	VAL
3	1D	37	LEU
3	1D	39	LYS
3	1D	94	LEU
3	1D	99	ASP
3	1D	103	ARG
3	1D	111	LEU
3	1D	113	VAL
3	1D	140	THR
3	1D	141	VAL
3	1D	142	VAL
3	1D	173	VAL
3	1D	183	ARG
3	1D	211	ARG
3	1D	229	VAL
3	1D	242	ARG
3	1D	259	THR
4	1E	33	VAL
4	1E	72	VAL
4	1E	73	GLU
4	1E	75	VAL

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Mol	Chain	Res	Type
4	1E	89	ASP
4	1E	116	VAL
4	1E	119	ARG
4	1E	181	LEU
5	1F	12	LEU
5	1F	24	LEU
5	1F	53	THR
5	1F	57	VAL
5	1F	74	ARG
5	1F	95	ARG
5	1F	110	LEU
5	1F	125	LEU
5	1F	140	LEU
5	1F	158	THR
5	1F	162	LEU
5	1F	170	LEU
5	1F	192	LEU
5	1F	195	ASP
5	1F	197	ASP
5	1F	205	ARG
6	1G	7	LEU
6	1G	43	LEU
6	1G	45	GLU
6	1G	52	ILE
6	1G	53	LEU
6	1G	79	ASN
6	1G	82	LEU
6	1G	84	LYS
6	1G	145	THR
6	1G	153	ARG
7	1H	13	LYS
7	1H	23	ARG
7	1H	71	LEU
7	1H	107	VAL
7	1H	119	GLU
7	1H	122	THR
7	1H	130	ARG
7	1H	139	GLN
8	1I	5	LEU
8	1I	9	LEU
8	1I	41	GLU
8	1I	44	LEU

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Mol	Chain	Res	Type
8	1I	52	ARG
8	1I	57	ARG
8	1I	60	GLU
8	1I	74	ASN
8	1I	75	LEU
8	1I	92	VAL
8	1I	109	ILE
8	1I	140	LEU
9	1N	14	VAL
9	1N	15	LEU
9	1N	33	LEU
9	1N	34	LEU
9	1N	48	MET
9	1N	61	ARG
9	1N	62	VAL
9	1N	87	LEU
9	1N	99	LEU
9	1N	115	ARG
10	1O	69	ILE
10	1O	98	VAL
11	1P	1	MET
11	1P	3	LEU
11	1P	65	ARG
11	1P	90	ARG
11	1P	149	GLU
12	1Q	7	MET
12	1Q	16	ARG
12	1Q	59	ARG
12	1Q	75	THR
12	1Q	109	VAL
12	1Q	112	GLU
13	1R	6	SER
13	1R	8	ARG
13	1R	29	LEU
13	1R	36	THR
13	1R	75	LEU
13	1R	100	LEU
13	1R	102	GLU
13	1R	114	VAL
14	1S	3	ARG
14	1S	25	ARG
14	1S	50	SER

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Mol	Chain	Res	Type
14	1S	59	LYS
14	1S	68	GLN
14	1S	85	VAL
14	1S	110	LEU
15	1T	28	VAL
15	1T	33	LYS
15	1T	36	GLU
15	1T	39	ARG
15	1T	49	VAL
15	1T	53	ARG
15	1T	67	SER
15	1T	78	LEU
15	1T	82	LEU
15	1T	96	ARG
15	1T	118	ARG
16	1U	5	LYS
16	1U	30	LYS
16	1U	59	ARG
16	1U	74	LEU
16	1U	77	SER
16	1U	104	GLN
17	1V	32	THR
17	1V	52	VAL
17	1V	61	VAL
17	1V	62	LEU
17	1V	79	VAL
18	1W	11	ARG
18	1W	15	ARG
18	1W	17	VAL
18	1W	23	LEU
18	1W	100	THR
18	1W	107	LEU
19	1X	35	THR
19	1X	45	THR
19	1X	60	ARG
20	1Y	43	ASN
20	1Y	64	GLU
20	1Y	70	SER
20	1Y	72	VAL
20	1Y	85	VAL
21	1Z	14	LYS
21	1Z	18	LEU

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Mol	Chain	Res	Type
21	1Z	50	GLN
21	1Z	61	LEU
21	1Z	66	SER
21	1Z	86	VAL
21	1Z	103	ARG
21	1Z	126	VAL
21	1Z	129	SER
21	1Z	131	ARG
21	1Z	135	GLU
21	1Z	150	LEU
21	1Z	161	VAL
21	1Z	170	THR
22	10	9	SER
22	10	55	ARG
23	11	21	ARG
23	11	30	VAL
23	11	40	ARG
23	11	46	LEU
23	11	91	LYS
23	11	95	LEU
24	12	70	GLN
25	13	3	ARG
25	13	23	LEU
25	13	54	VAL
25	13	56	VAL
26	14	1	MET
26	14	27	THR
26	14	49	PHE
26	14	60	GLN
26	14	61	ARG
26	14	67	TYR
27	15	6	VAL
27	15	16	ARG
27	15	26	THR
27	15	29	THR
27	15	58	LEU
27	15	60	VAL
28	16	5	VAL
28	16	6	ARG
28	16	14	THR
28	16	45	LYS
28	16	47	THR

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Mol	Chain	Res	Type
28	16	48	VAL
29	17	34	ARG
29	17	43	THR
29	17	46	VAL
29	17	48	LYS
30	18	14	VAL
30	18	23	VAL
30	18	31	HIS
30	18	34	TRP
31	19	13	LYS
33	1b	7	VAL
33	1b	10	LEU
33	1b	12	GLU
33	1b	19	HIS
33	1b	24	TRP
33	1b	44	LEU
33	1b	59	GLU
33	1b	80	ILE
33	1b	107	THR
33	1b	111	ARG
33	1b	124	SER
33	1b	126	GLU
33	1b	158	LEU
33	1b	160	ASP
33	1b	163	PHE
33	1b	185	ILE
33	1b	189	ASP
33	1b	196	LEU
33	1b	212	GLN
33	1b	221	LEU
34	1c	38	ARG
34	1c	64	VAL
34	1c	67	THR
34	1c	70	VAL
34	1c	102	ASN
34	1c	105	GLU
34	1c	144	SER
34	1c	161	GLU
35	1d	34	GLU
35	1d	58	LEU
35	1d	76	ARG
35	1d	85	LYS

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Mol	Chain	Res	Type
35	1d	100	ARG
35	1d	123	HIS
35	1d	127	THR
35	1d	135	LEU
35	1d	152	SER
35	1d	182	LYS
35	1d	194	LEU
35	1d	196	LEU
36	1e	12	LEU
36	1e	31	LEU
36	1e	34	VAL
36	1e	41	VAL
37	1f	1	MET
37	1f	21	LEU
37	1f	69	GLU
37	1f	73	ASN
38	1g	6	ARG
38	1g	15	ASP
38	1g	31	MET
38	1g	45	ASP
38	1g	104	LEU
38	1g	113	GLU
38	1g	138	LYS
39	1h	26	VAL
39	1h	52	ASP
39	1h	63	LEU
39	1h	107	LEU
39	1h	133	LEU
39	1h	137	VAL
40	1i	64	THR
40	1i	65	VAL
40	1i	81	ILE
40	1i	87	GLN
40	1i	111	ARG
40	1i	127	LYS
41	1j	19	SER
41	1j	25	GLU
41	1j	38	ILE
41	1j	43	ARG
41	1j	46	ARG
41	1j	55	LYS
41	1j	67	THR

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Mol	Chain	Res	Type
41	1j	98	ILE
41	1j	100	THR
42	1k	14	VAL
42	1k	16	SER
42	1k	54	ARG
42	1k	83	ILE
42	1k	87	THR
42	1k	93	GLN
43	1l	33	ARG
43	1l	83	VAL
44	1m	14	ARG
44	1m	15	VAL
44	1m	19	LEU
44	1m	43	THR
44	1m	70	LEU
44	1m	94	ARG
44	1m	106	ASN
45	1n	3	ARG
45	1n	7	ILE
45	1n	13	THR
45	1n	18	VAL
45	1n	57	ARG
46	1o	3	ILE
46	1o	39	LEU
46	1o	40	SER
46	1o	66	LEU
46	1o	84	LYS
47	1p	6	LEU
47	1p	21	VAL
47	1p	29	ASP
47	1p	34	GLU
47	1p	35	LYS
47	1p	42	ARG
47	1p	45	THR
47	1p	60	LEU
47	1p	61	SER
47	1p	62	VAL
47	1p	67	THR
47	1p	72	ARG
47	1p	73	LEU
47	1p	74	LEU
48	1q	20	THR

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Mol	Chain	Res	Type
48	1q	24	GLU
48	1q	97	SER
48	1q	99	SER
49	1r	25	THR
49	1r	37	VAL
49	1r	87	ARG
50	1s	28	LYS
50	1s	30	LEU
50	1s	37	ARG
50	1s	38	SER
50	1s	41	VAL
51	1t	15	ARG
51	1t	24	LEU
51	1t	37	SER
51	1t	62	LEU
51	1t	100	ILE
52	1u	8	THR
53	1y	60	VAL
3	2D	3	VAL
3	2D	61	LEU
3	2D	88	ARG
3	2D	99	ASP
3	2D	103	ARG
3	2D	113	VAL
3	2D	142	VAL
3	2D	183	ARG
3	2D	211	ARG
3	2D	221	VAL
3	2D	229	VAL
3	2D	242	ARG
3	2D	259	THR
4	2E	33	VAL
4	2E	72	VAL
4	2E	75	VAL
4	2E	89	ASP
4	2E	113	PHE
4	2E	116	VAL
4	2E	119	ARG
4	2E	170	LEU
4	2E	181	LEU
4	2E	184	VAL
5	2F	17	ARG

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Mol	Chain	Res	Type
5	2F	20	LEU
5	2F	24	LEU
5	2F	33	LEU
5	2F	57	VAL
5	2F	60	SER
5	2F	74	ARG
5	2F	88	VAL
5	2F	107	LYS
5	2F	126	VAL
5	2F	132	VAL
5	2F	136	THR
5	2F	158	THR
5	2F	168	ARG
5	2F	175	THR
5	2F	183	VAL
5	2F	192	LEU
5	2F	197	ASP
5	2F	201	VAL
6	2G	3	LEU
6	2G	7	LEU
6	2G	28	VAL
6	2G	43	LEU
6	2G	49	ASP
6	2G	84	LYS
6	2G	116	ASP
6	2G	133	LEU
6	2G	152	LEU
6	2G	165	THR
6	2G	167	GLU
7	2H	27	LYS
7	2H	30	LYS
7	2H	33	LEU
7	2H	43	VAL
7	2H	44	VAL
7	2H	45	VAL
7	2H	49	VAL
7	2H	69	ARG
7	2H	70	THR
7	2H	87	LEU
7	2H	95	ARG
7	2H	98	LEU
7	2H	105	LEU

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Mol	Chain	Res	Type
7	2H	134	SER
7	2H	136	ILE
7	2H	139	GLN
8	2I	38	LEU
8	2I	42	SER
8	2I	51	ILE
8	2I	68	LEU
8	2I	76	THR
8	2I	92	VAL
8	2I	108	THR
8	2I	117	GLU
9	2N	28	THR
9	2N	34	LEU
9	2N	48	MET
9	2N	65	LYS
9	2N	68	GLU
9	2N	99	LEU
9	2N	133	GLN
9	2N	138	LEU
10	2O	69	ILE
10	2O	108	GLU
11	2P	15	ARG
11	2P	83	VAL
11	2P	86	LYS
11	2P	95	VAL
11	2P	119	GLU
12	2Q	7	MET
12	2Q	22	LYS
12	2Q	31	ASP
12	2Q	55	VAL
12	2Q	59	ARG
12	2Q	101	ARG
12	2Q	103	MET
12	2Q	106	VAL
12	2Q	109	VAL
12	2Q	110	THR
12	2Q	112	GLU
12	2Q	133	ARG
13	2R	29	LEU
13	2R	36	THR
13	2R	73	VAL
13	2R	75	LEU

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Mol	Chain	Res	Type
13	2R	96	ARG
13	2R	100	LEU
14	2S	11	LYS
14	2S	21	THR
14	2S	25	ARG
14	2S	36	TYR
14	2S	52	SER
14	2S	53	SER
14	2S	64	GLU
14	2S	69	VAL
14	2S	71	ARG
14	2S	78	LEU
15	2T	17	THR
15	2T	28	VAL
15	2T	38	ASN
15	2T	51	ARG
15	2T	78	LEU
15	2T	89	VAL
15	2T	118	ARG
16	2U	31	SER
16	2U	59	ARG
16	2U	74	LEU
16	2U	77	SER
16	2U	104	GLN
17	2V	12	TYR
17	2V	26	ASP
17	2V	46	VAL
17	2V	51	VAL
17	2V	79	VAL
17	2V	100	ARG
18	2W	11	ARG
18	2W	17	VAL
18	2W	23	LEU
18	2W	60	ASN
18	2W	63	ASP
18	2W	65	LEU
18	2W	67	ASP
18	2W	70	TYR
18	2W	100	THR
18	2W	107	LEU
19	2X	35	THR
19	2X	38	GLU

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Mol	Chain	Res	Type
19	2X	57	LEU
19	2X	81	VAL
20	2Y	1	MET
20	2Y	2	ARG
20	2Y	6	HIS
20	2Y	29	GLU
20	2Y	49	VAL
20	2Y	72	VAL
20	2Y	99	CYS
21	2Z	6	LYS
21	2Z	31	ARG
21	2Z	33	LEU
21	2Z	35	ARG
21	2Z	42	VAL
21	2Z	56	VAL
21	2Z	72	ARG
21	2Z	86	VAL
21	2Z	132	ASN
21	2Z	185	GLU
22	20	10	THR
22	20	55	ARG
22	20	64	ASP
22	20	68	GLU
23	21	11	ARG
23	21	21	ARG
23	21	40	ARG
23	21	95	LEU
24	22	8	LYS
24	22	17	SER
24	22	30	ARG
24	22	32	LEU
24	22	35	LEU
24	22	40	SER
24	22	44	LEU
24	22	53	LEU
24	22	70	GLN
25	23	23	LEU
25	23	31	LEU
25	23	54	VAL
26	24	15	ILE
26	24	23	GLU
26	24	44	THR

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Mol	Chain	Res	Type
26	24	50	VAL
26	24	53	GLU
26	24	60	GLN
26	24	63	TYR
26	24	67	TYR
27	25	6	VAL
27	25	59	GLU
28	26	13	CYS
28	26	14	THR
28	26	19	ARG
28	26	48	VAL
28	26	52	VAL
29	27	1	MET
29	27	46	VAL
29	27	48	LYS
30	28	23	VAL
30	28	31	HIS
30	28	34	TRP
31	29	12	ASP
31	29	26	ILE
33	2b	8	LYS
33	2b	24	TRP
33	2b	28	PHE
33	2b	45	GLN
33	2b	55	PHE
33	2b	56	ARG
33	2b	67	THR
33	2b	71	VAL
33	2b	74	LYS
33	2b	83	MET
33	2b	93	VAL
33	2b	96	ARG
33	2b	97	TRP
33	2b	111	ARG
33	2b	121	LEU
33	2b	124	SER
33	2b	136	VAL
33	2b	164	VAL
33	2b	170	GLU
33	2b	185	ILE
33	2b	200	ILE
33	2b	224	GLN

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Mol	Chain	Res	Type
33	2b	229	VAL
34	2c	6	HIS
34	2c	15	THR
34	2c	26	LYS
34	2c	33	LEU
34	2c	45	LYS
34	2c	47	LEU
34	2c	49	SER
34	2c	52	LEU
34	2c	66	VAL
34	2c	102	ASN
34	2c	110	ASN
34	2c	143	GLU
34	2c	152	ILE
34	2c	204	LEU
34	2c	207	VAL
35	2d	5	ILE
35	2d	8	VAL
35	2d	28	SER
35	2d	31	CYS
35	2d	34	GLU
35	2d	58	LEU
35	2d	59	ARG
35	2d	106	TYR
35	2d	107	ARG
35	2d	108	LEU
35	2d	122	ARG
35	2d	135	LEU
35	2d	141	ARG
35	2d	150	GLU
35	2d	155	LEU
35	2d	166	LYS
35	2d	170	VAL
35	2d	175	SER
35	2d	209	ARG
36	2e	9	LYS
36	2e	12	LEU
36	2e	20	GLN
36	2e	31	LEU
36	2e	34	VAL
36	2e	41	VAL
36	2e	45	PHE

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Mol	Chain	Res	Type
36	2e	75	THR
36	2e	79	GLU
36	2e	111	GLU
36	2e	143	ARG
37	2f	10	LEU
37	2f	69	GLU
37	2f	75	LEU
37	2f	81	ILE
37	2f	92	LYS
37	2f	95	GLU
38	2g	9	VAL
38	2g	21	VAL
38	2g	24	THR
38	2g	50	ILE
38	2g	75	VAL
38	2g	77	SER
38	2g	95	ARG
38	2g	113	GLU
38	2g	115	ARG
38	2g	131	LYS
38	2g	138	LYS
38	2g	153	HIS
38	2g	155	ARG
39	2h	63	LEU
39	2h	84	ARG
39	2h	85	ARG
39	2h	91	ARG
39	2h	112	LEU
39	2h	115	SER
39	2h	122	ARG
39	2h	133	LEU
40	2i	17	VAL
40	2i	27	THR
40	2i	28	VAL
40	2i	47	LEU
40	2i	51	ARG
40	2i	70	LYS
40	2i	71	SER
40	2i	87	GLN
40	2i	88	TYR
40	2i	93	ARG
40	2i	108	VAL

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Mol	Chain	Res	Type
40	2i	109	VAL
40	2i	125	TYR
41	2j	7	LYS
41	2j	16	LEU
41	2j	29	ARG
41	2j	30	SER
41	2j	34	VAL
41	2j	38	ILE
41	2j	47	PHE
41	2j	65	LEU
41	2j	67	THR
41	2j	74	ILE
41	2j	84	GLN
41	2j	95	GLU
42	2k	67	ASP
42	2k	81	ASP
42	2k	84	VAL
42	2k	117	ASN
42	2k	120	ARG
43	2l	28	LYS
43	2l	33	ARG
43	2l	47	LYS
43	2l	81	SER
43	2l	83	VAL
43	2l	123	LYS
44	2m	19	LEU
44	2m	47	ASP
44	2m	60	VAL
44	2m	63	THR
44	2m	96	LEU
44	2m	103	THR
44	2m	109	THR
45	2n	3	ARG
45	2n	13	THR
45	2n	18	VAL
46	2o	3	ILE
46	2o	38	ARG
46	2o	39	LEU
46	2o	64	ARG
47	2p	2	VAL
47	2p	20	VAL
47	2p	21	VAL

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Mol	Chain	Res	Type
47	2p	28	ARG
47	2p	60	LEU
47	2p	62	VAL
47	2p	69	THR
48	2q	24	GLU
48	2q	56	VAL
48	2q	60	ILE
48	2q	85	VAL
48	2q	86	GLU
48	2q	87	LYS
48	2q	90	ILE
49	2r	25	THR
49	2r	37	VAL
49	2r	82	THR
50	2s	5	LEU
50	2s	27	GLU
50	2s	41	VAL
50	2s	48	THR
50	2s	56	GLN
50	2s	66	MET
50	2s	77	THR
50	2s	79	THR
51	2t	15	ARG
51	2t	24	LEU
51	2t	41	ILE
51	2t	45	GLN
51	2t	46	GLU
51	2t	86	ARG
52	2u	15	ARG
53	2y	6	THR
53	2y	13	THR
53	2y	16	ILE
53	2y	24	LEU
53	2y	46	GLN
53	2y	56	THR

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (117) such sidechains are listed below:

Mol	Chain	Res	Type
3	1D	87	ASN
3	1D	126	GLN
3	1D	253	GLN

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Mol	Chain	Res	Type
4	1E	48	GLN
5	1F	8	GLN
5	1F	69	HIS
5	1F	203	GLN
6	1G	26	GLN
7	1H	139	GLN
15	1T	58	ASN
15	1T	123	GLN
18	1W	60	ASN
19	1X	31	HIS
19	1X	82	GLN
20	1Y	6	HIS
20	1Y	43	ASN
20	1Y	92	ASN
21	1Z	50	GLN
21	1Z	73	GLN
21	1Z	151	HIS
22	10	35	ASN
23	11	56	GLN
25	13	32	GLN
33	1b	40	HIS
33	1b	78	GLN
33	1b	212	GLN
34	1c	6	HIS
34	1c	37	GLN
34	1c	102	ASN
34	1c	104	GLN
34	1c	108	ASN
34	1c	139	GLN
35	1d	42	GLN
35	1d	45	GLN
35	1d	119	GLN
35	1d	123	HIS
35	1d	129	ASN
36	1e	20	GLN
37	1f	73	ASN
37	1f	100	ASN
38	1g	28	ASN
38	1g	148	ASN
39	1h	70	GLN
40	1i	3	GLN
40	1i	73	GLN

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Mol	Chain	Res	Type
40	1i	87	GLN
41	1j	21	GLN
41	1j	56	HIS
41	1j	69	ASN
42	1k	93	GLN
42	1k	99	GLN
43	1l	99	HIS
45	1n	49	HIS
46	1o	71	GLN
47	1p	16	HIS
48	1q	16	GLN
48	1q	93	GLN
50	1s	69	HIS
50	1s	83	HIS
51	1t	18	GLN
53	1y	38	HIS
3	2D	253	GLN
4	2E	48	GLN
5	2F	69	HIS
5	2F	75	HIS
5	2F	133	ASN
6	2G	130	ASN
6	2G	132	ASN
8	2I	43	ASN
8	2I	133	HIS
9	2N	133	GLN
10	2O	89	ASN
12	2Q	89	ASN
15	2T	38	ASN
15	2T	58	ASN
16	2U	117	GLN
17	2V	64	HIS
19	2X	31	HIS
19	2X	82	GLN
21	2Z	73	GLN
25	23	32	GLN
26	24	20	ASN
33	2b	19	HIS
33	2b	40	HIS
33	2b	76	GLN
33	2b	146	GLN
33	2b	212	GLN

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Mol	Chain	Res	Type
33	2b	224	GLN
34	2c	6	HIS
34	2c	37	GLN
34	2c	176	HIS
35	2d	77	ASN
35	2d	116	GLN
35	2d	125	HIS
35	2d	160	GLN
36	2e	20	GLN
37	2f	73	ASN
37	2f	100	ASN
38	2g	28	ASN
38	2g	64	GLN
38	2g	86	GLN
40	2i	3	GLN
41	2j	13	HIS
41	2j	68	HIS
41	2j	69	ASN
43	2l	99	HIS
44	2m	62	ASN
46	2o	9	GLN
47	2p	76	GLN
48	2q	16	GLN
48	2q	26	GLN
48	2q	93	GLN
50	2s	83	HIS
53	2y	9	GLN
53	2y	33	HIS
53	2y	58	ASN
53	2y	79	ASN

5.3.3 RNA

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	1A	2863/2915 (98%)	402 (14%)	35 (1%)
1	2A	2856/2915 (97%)	460 (16%)	37 (1%)
2	1B	119/121 (98%)	13 (10%)	0
2	2B	119/121 (98%)	17 (14%)	0
32	1a	1494/1521 (98%)	243 (16%)	0
32	2a	1498/1521 (98%)	257 (17%)	0
All	All	8949/9114 (98%)	1392 (15%)	72 (0%)

All (1392) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	1A	12	U
1	1A	13	A
1	1A	15	G
1	1A	33	U
1	1A	34	C
1	1A	45	C
1	1A	71	A
1	1A	74	A
1	1A	75	G
1	1A	95	G
1	1A	118	A
1	1A	119	A
1	1A	120	U
1	1A	181	A
1	1A	182	A
1	1A	196	A
1	1A	197	A
1	1A	199	A
1	1A	205	G
1	1A	215	G
1	1A	216	A
1	1A	221	A
1	1A	222	A
1	1A	229	A
1	1A	248	G
1	1A	265	A
1	1A	271(I)	G
1	1A	271(K)	U
1	1A	271(L)	U
1	1A	271(M)	G
1	1A	271(N)	U
1	1A	271(O)	C
1	1A	272(A)	U
1	1A	272(B)	G
1	1A	272(G)	C
1	1A	275	G
1	1A	279	C
1	1A	283	A
1	1A	311	A
1	1A	330	A
1	1A	352	G
1	1A	363	G

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Mol	Chain	Res	Type
1	1A	386	G
1	1A	396	G
1	1A	405	U
1	1A	411	G
1	1A	412	A
1	1A	421	U
1	1A	422	A
1	1A	428	A
1	1A	448	U
1	1A	451	C
1	1A	454	A
1	1A	456	C
1	1A	457	A
1	1A	481	G
1	1A	505	A
1	1A	509	C
1	1A	528	A
1	1A	530	G
1	1A	531	C
1	1A	532	A
1	1A	533	G
1	1A	545	G
1	1A	549	G
1	1A	551	G
1	1A	563	G
1	1A	573	G
1	1A	575	A
1	1A	586	A
1	1A	603	A
1	1A	604	G
1	1A	607	U
1	1A	614(B)	G
1	1A	615	G
1	1A	627	A
1	1A	637	A
1	1A	645	C
1	1A	646	A
1	1A	652(E)	G
1	1A	652(T)	C
1	1A	652(U)	G
1	1A	668	G
1	1A	669	G

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Mol	Chain	Res	Type
1	1A	686	G
1	1A	730	C
1	1A	740	U
1	1A	746	A
1	1A	747	U
1	1A	765	G
1	1A	775	G
1	1A	776	G
1	1A	782	A
1	1A	783	A
1	1A	784	A
1	1A	785	G
1	1A	789	A
1	1A	792	G
1	1A	805	G
1	1A	812	C
1	1A	827	U
1	1A	828	U
1	1A	859	G
1	1A	866	A
1	1A	883	G
1	1A	886	C
1	1A	888	C
1	1A	889	C
1	1A	890	A
1	1A	892	G
1	1A	896	A
1	1A	897	C
1	1A	907	U
1	1A	910	A
1	1A	932	G
1	1A	945	A
1	1A	946	G
1	1A	953	A
1	1A	958	U
1	1A	959	A
1	1A	961	C
1	1A	963	U
1	1A	974	G
1	1A	975	C
1	1A	983	A
1	1A	996	A

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Mol	Chain	Res	Type
1	1A	1005	C
1	1A	1012	U
1	1A	1013	C
1	1A	1026	U
1	1A	1033	U
1	1A	1039	G
1	1A	1041	C
1	1A	1042	G
1	1A	1043	C
1	1A	1046	A
1	1A	1047	G
1	1A	1048	A
1	1A	1052	C
1	1A	1053	C
1	1A	1054	A
1	1A	1059	G
1	1A	1061	U
1	1A	1062	G
1	1A	1063	G
1	1A	1065	U
1	1A	1066	U
1	1A	1067	A
1	1A	1068	G
1	1A	1070	A
1	1A	1071	G
1	1A	1073	A
1	1A	1075	C
1	1A	1076	C
1	1A	1077	A
1	1A	1079	C
1	1A	1083	U
1	1A	1087	G
1	1A	1088	A
1	1A	1090	U
1	1A	1096	A
1	1A	1097	U
1	1A	1104	C
1	1A	1109	C
1	1A	1110	G
1	1A	1112	G
1	1A	1116	C
1	1A	1128	A

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Mol	Chain	Res	Type
1	1A	1130	U
1	1A	1135	C
1	1A	1136	G
1	1A	1155	A
1	1A	1171	G
1	1A	1173	G
1	1A	1174	A
1	1A	1175	U
1	1A	1176	G
1	1A	1177	A
1	1A	1178	C
1	1A	1210	A
1	1A	1211	U
1	1A	1220	A
1	1A	1253	A
1	1A	1256	G
1	1A	1271	G
1	1A	1272	A
1	1A	1273	U
1	1A	1300	U
1	1A	1301	A
1	1A	1303	G
1	1A	1352	U
1	1A	1359	A
1	1A	1360	A
1	1A	1365	A
1	1A	1370	C
1	1A	1384	A
1	1A	1385	G
1	1A	1416	G
1	1A	1417	C
1	1A	1420	U
1	1A	1421	G
1	1A	1428	C
1	1A	1445	A
1	1A	1450	G
1	1A	1452	A
1	1A	1459	G
1	1A	1467	C
1	1A	1471	A
1	1A	1478	G
1	1A	1482	G

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Mol	Chain	Res	Type
1	1A	1494	A
1	1A	1506	C
1	1A	1507	A
1	1A	1509	C
1	1A	1509(A)	A
1	1A	1525	G
1	1A	1531	C
1	1A	1542	A
1	1A	1543	C
1	1A	1558	A
1	1A	1566	A
1	1A	1569	A
1	1A	1578	U
1	1A	1579	A
1	1A	1581	G
1	1A	1584	C
1	1A	1586	A
1	1A	1608	A
1	1A	1609	A
1	1A	1610	A
1	1A	1648	C
1	1A	1654	A
1	1A	1674	G
1	1A	1696	G
1	1A	1700	A
1	1A	1701	A
1	1A	1703	G
1	1A	1722	A
1	1A	1739	U
1	1A	1762	A
1	1A	1763	G
1	1A	1764	G
1	1A	1773	A
1	1A	1780	A
1	1A	1782	C
1	1A	1791	A
1	1A	1800	C
1	1A	1801	G
1	1A	1812	A
1	1A	1816	G
1	1A	1817	G
1	1A	1828	G

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Mol	Chain	Res	Type
1	1A	1847	A
1	1A	1877	A
1	1A	1878	G
1	1A	1889	A
1	1A	1900	A
1	1A	1906	G
1	1A	1913	A
1	1A	1914	C
1	1A	1915	5MU
1	1A	1929	G
1	1A	1930	G
1	1A	1937	A
1	1A	1938	A
1	1A	1955	U
1	1A	1963	U
1	1A	1967	C
1	1A	1970	A
1	1A	1971	A
1	1A	1972	A
1	1A	1992	G
1	1A	1993	U
1	1A	1997	G
1	1A	2020	A
1	1A	2023	G
1	1A	2031	A
1	1A	2033	A
1	1A	2043	C
1	1A	2055	C
1	1A	2056	G
1	1A	2060	A
1	1A	2061	G
1	1A	2069	G
1	1A	2103	C
1	1A	2104	G
1	1A	2107	C
1	1A	2108	C
1	1A	2112	G
1	1A	2116	G
1	1A	2117	A
1	1A	2118	U
1	1A	2123	G
1	1A	2126	A

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Mol	Chain	Res	Type
1	1A	2127	G
1	1A	2131	G
1	1A	2132	U
1	1A	2133	G
1	1A	2134	A
1	1A	2135	A
1	1A	2137	C
1	1A	2138	C
1	1A	2139	C
1	1A	2142	C
1	1A	2146	C
1	1A	2148	G
1	1A	2157	G
1	1A	2158	A
1	1A	2159	G
1	1A	2164	C
1	1A	2171	A
1	1A	2173	A
1	1A	2178	C
1	1A	2181	G
1	1A	2185	C
1	1A	2186	G
1	1A	2187	G
1	1A	2190	G
1	1A	2192	G
1	1A	2198	A
1	1A	2206	G
1	1A	2207	G
1	1A	2208	A
1	1A	2225	A
1	1A	2238	G
1	1A	2268	A
1	1A	2273	A
1	1A	2279	G
1	1A	2280	G
1	1A	2283	C
1	1A	2287	A
1	1A	2305	A
1	1A	2308	G
1	1A	2312	U
1	1A	2320	A
1	1A	2325	G

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Mol	Chain	Res	Type
1	1A	2334	G
1	1A	2336	A
1	1A	2347	C
1	1A	2350	C
1	1A	2383	G
1	1A	2385	C
1	1A	2393	A
1	1A	2406	U
1	1A	2422	A
1	1A	2425	A
1	1A	2429	G
1	1A	2430	A
1	1A	2431	U
1	1A	2435	A
1	1A	2439	A
1	1A	2441	C
1	1A	2448	A
1	1A	2469	A
1	1A	2476	A
1	1A	2477	C
1	1A	2478	A
1	1A	2491	U
1	1A	2502	G
1	1A	2504	U
1	1A	2505	G
1	1A	2506	U
1	1A	2518	A
1	1A	2529	G
1	1A	2535	G
1	1A	2554	U
1	1A	2566	A
1	1A	2567	G
1	1A	2573	C
1	1A	2602	A
1	1A	2603	G
1	1A	2609	U
1	1A	2611	U
1	1A	2612	C
1	1A	2630	G
1	1A	2654	A
1	1A	2689	U
1	1A	2690	C

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Mol	Chain	Res	Type
1	1A	2702	U
1	1A	2703	C
1	1A	2712(A)	A
1	1A	2713	A
1	1A	2714	G
1	1A	2726	U
1	1A	2733	A
1	1A	2758	A
1	1A	2761	G
1	1A	2765	A
1	1A	2766	G
1	1A	2778	A
1	1A	2789	C
1	1A	2790	A
1	1A	2791	C
1	1A	2802	G
1	1A	2807	G
1	1A	2818	G
1	1A	2820	A
1	1A	2821	A
1	1A	2833	G
1	1A	2835	A
1	1A	2872	G
1	1A	2894	G
2	1B	2	C
2	1B	7	G
2	1B	13	A
2	1B	45	A
2	1B	53	A
2	1B	56	G
2	1B	63	G
2	1B	64	C
2	1B	67	G
2	1B	73	A
2	1B	85	G
2	1B	90	A
2	1B	110	G
32	1a	7	G
32	1a	9	G
32	1a	32	A
32	1a	39	G
32	1a	48	C

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Mol	Chain	Res	Type
32	1a	50	A
32	1a	51	A
32	1a	61	G
32	1a	78	G
32	1a	79	G
32	1a	97	G
32	1a	101	A
32	1a	116	A
32	1a	121	C
32	1a	131	C
32	1a	143	A
32	1a	144	G
32	1a	156	G
32	1a	163	C
32	1a	165	C
32	1a	173	U
32	1a	174	C
32	1a	182	U
32	1a	189(D)	C
32	1a	189(G)	G
32	1a	195	A
32	1a	197	A
32	1a	199	G
32	1a	203	U
32	1a	204	U
32	1a	216	G
32	1a	247	G
32	1a	251	G
32	1a	258	G
32	1a	266	G
32	1a	267	C
32	1a	289	G
32	1a	306	G
32	1a	321	A
32	1a	328	C
32	1a	329	A
32	1a	330	C
32	1a	332	G
32	1a	348	G
32	1a	352	C
32	1a	353	A
32	1a	354	G

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Mol	Chain	Res	Type
32	1a	356	A
32	1a	367	U
32	1a	372	C
32	1a	373	A
32	1a	384	G
32	1a	398	C
32	1a	406	G
32	1a	412	A
32	1a	413	G
32	1a	423	G
32	1a	424	G
32	1a	429	U
32	1a	430	A
32	1a	439	A
32	1a	442	C
32	1a	452	A
32	1a	458	C
32	1a	461	A
32	1a	470	C
32	1a	484	G
32	1a	485	G
32	1a	496	A
32	1a	498	U
32	1a	505	G
32	1a	509	A
32	1a	510	A
32	1a	511	C
32	1a	518	C
32	1a	532	A
32	1a	547	A
32	1a	550	G
32	1a	559	A
32	1a	561	U
32	1a	572	A
32	1a	573	A
32	1a	576	G
32	1a	577	G
32	1a	596	C
32	1a	607	A
32	1a	616	G
32	1a	618	C
32	1a	619	U

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Mol	Chain	Res	Type
32	1a	630	G
32	1a	631	G
32	1a	632	A
32	1a	642	A
32	1a	653	A
32	1a	661	G
32	1a	665	A
32	1a	666	G
32	1a	673	G
32	1a	687	A
32	1a	688	G
32	1a	723	U
32	1a	724	G
32	1a	731	G
32	1a	755	G
32	1a	770	C
32	1a	777	A
32	1a	793	U
32	1a	794	A
32	1a	816	A
32	1a	817	C
32	1a	821	G
32	1a	828	A
32	1a	829	G
32	1a	839	U
32	1a	840	C
32	1a	841	U
32	1a	848	C
32	1a	851	G
32	1a	914	A
32	1a	916	G
32	1a	926	G
32	1a	927	G
32	1a	934	C
32	1a	935	A
32	1a	942	G
32	1a	960	U
32	1a	961	U
32	1a	968	A
32	1a	969	A
32	1a	971	G
32	1a	974	A

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Mol	Chain	Res	Type
32	1a	975	A
32	1a	976	G
32	1a	977	A
32	1a	992	U
32	1a	993	G
32	1a	994	A
32	1a	998	G
32	1a	999	C
32	1a	1001	A
32	1a	1001(A)	G
32	1a	1006	C
32	1a	1022	G
32	1a	1023	G
32	1a	1024	G
32	1a	1025	U
32	1a	1026	G
32	1a	1027	C
32	1a	1028	C
32	1a	1029	C
32	1a	1030	C
32	1a	1030(A)	G
32	1a	1030(B)	C
32	1a	1030(C)	G
32	1a	1030(D)	A
32	1a	1032	G
32	1a	1033	G
32	1a	1037	C
32	1a	1039	C
32	1a	1042	G
32	1a	1044	A
32	1a	1046	A
32	1a	1053	G
32	1a	1065	U
32	1a	1066	C
32	1a	1067	A
32	1a	1070	U
32	1a	1081	G
32	1a	1094	G
32	1a	1095	U
32	1a	1101	A
32	1a	1104	G
32	1a	1121	U

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Mol	Chain	Res	Type
32	1a	1124	G
32	1a	1130	A
32	1a	1132	C
32	1a	1134	G
32	1a	1136	U
32	1a	1137	C
32	1a	1139	G
32	1a	1140	C
32	1a	1146	A
32	1a	1150	U
32	1a	1152	A
32	1a	1159	U
32	1a	1166	G
32	1a	1168	A
32	1a	1183	A
32	1a	1184	G
32	1a	1196	U
32	1a	1197	G
32	1a	1202	G
32	1a	1212	U
32	1a	1213	A
32	1a	1224	G
32	1a	1227	A
32	1a	1238	A
32	1a	1256	A
32	1a	1257	U
32	1a	1258	G
32	1a	1260	C
32	1a	1270	C
32	1a	1278	U
32	1a	1279	A
32	1a	1280	A
32	1a	1286	A
32	1a	1287	A
32	1a	1299	A
32	1a	1300	G
32	1a	1302	U
32	1a	1320	C
32	1a	1322	C
32	1a	1340	A
32	1a	1346	A
32	1a	1347	G

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Mol	Chain	Res	Type
32	1a	1353	G
32	1a	1363	C
32	1a	1364	U
32	1a	1370	G
32	1a	1379	G
32	1a	1397	C
32	1a	1419	G
32	1a	1442	G
32	1a	1442(A)	G
32	1a	1442(B)	A
32	1a	1447	A
32	1a	1452	C
32	1a	1456	G
32	1a	1469	G
32	1a	1487	G
32	1a	1492	A
32	1a	1493	A
32	1a	1497	G
32	1a	1499	A
32	1a	1503	A
32	1a	1504	G
32	1a	1505	G
32	1a	1506	U
32	1a	1517	G
32	1a	1520	G
32	1a	1529	G
32	1a	1530	G
32	1a	1531	A
1	2A	10	G
1	2A	12	U
1	2A	15	G
1	2A	34	C
1	2A	45	C
1	2A	51	G
1	2A	64	A
1	2A	71	A
1	2A	74	A
1	2A	75	G
1	2A	84	A
1	2A	94	C
1	2A	118	A
1	2A	119	A

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Mol	Chain	Res	Type
1	2A	120	U
1	2A	125	G
1	2A	141	A
1	2A	157	U
1	2A	181	A
1	2A	182	A
1	2A	196	A
1	2A	199	A
1	2A	205	G
1	2A	215	G
1	2A	216	A
1	2A	221	A
1	2A	222	A
1	2A	228	A
1	2A	229	A
1	2A	230	U
1	2A	248	G
1	2A	265	A
1	2A	271(L)	U
1	2A	271(M)	G
1	2A	271(N)	U
1	2A	271(O)	C
1	2A	272(A)	U
1	2A	272(B)	G
1	2A	272(J)	C
1	2A	277	C
1	2A	278	A
1	2A	283	A
1	2A	311	A
1	2A	317	G
1	2A	324	A
1	2A	327	G
1	2A	329	G
1	2A	330	A
1	2A	342	G
1	2A	352	G
1	2A	363	G
1	2A	363(B)	G
1	2A	386	G
1	2A	405	U
1	2A	406	G
1	2A	411	G

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Mol	Chain	Res	Type
1	2A	412	A
1	2A	428	A
1	2A	444	C
1	2A	451	C
1	2A	455	C
1	2A	457	A
1	2A	470	A
1	2A	481	G
1	2A	504	U
1	2A	505	A
1	2A	509	C
1	2A	530	G
1	2A	531	C
1	2A	532	A
1	2A	533	G
1	2A	545	G
1	2A	563	G
1	2A	573	G
1	2A	575	A
1	2A	603	A
1	2A	604	G
1	2A	607	U
1	2A	614(B)	G
1	2A	615	G
1	2A	616	G
1	2A	627	A
1	2A	634	C
1	2A	637	A
1	2A	645	C
1	2A	646	A
1	2A	652(B)	A
1	2A	652(C)	G
1	2A	653	A
1	2A	669	G
1	2A	686	G
1	2A	717	G
1	2A	730	C
1	2A	740	U
1	2A	752	A
1	2A	753	C
1	2A	765	G
1	2A	775	G

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Mol	Chain	Res	Type
1	2A	776	G
1	2A	782	A
1	2A	784	A
1	2A	785	G
1	2A	790	C
1	2A	792	G
1	2A	805	G
1	2A	812	C
1	2A	827	U
1	2A	857	C
1	2A	859	G
1	2A	866	A
1	2A	869	G
1	2A	878	A
1	2A	880	G
1	2A	881	G
1	2A	886	C
1	2A	887	A
1	2A	888	C
1	2A	889	C
1	2A	890	A
1	2A	893	C
1	2A	896	A
1	2A	897	C
1	2A	900	A
1	2A	901	A
1	2A	910	A
1	2A	914	C
1	2A	915	C
1	2A	917	A
1	2A	932	G
1	2A	938	G
1	2A	941	A
1	2A	945	A
1	2A	946	G
1	2A	953	A
1	2A	961	C
1	2A	963	U
1	2A	974	G
1	2A	975	C
1	2A	983	A
1	2A	996	A

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Mol	Chain	Res	Type
1	2A	1006	C
1	2A	1012	U
1	2A	1013	C
1	2A	1033	U
1	2A	1038	C
1	2A	1041	C
1	2A	1044	G
1	2A	1045	A
1	2A	1046	A
1	2A	1047	G
1	2A	1048	A
1	2A	1053	C
1	2A	1054	A
1	2A	1058	G
1	2A	1060	U
1	2A	1064	C
1	2A	1065	U
1	2A	1066	U
1	2A	1067	A
1	2A	1068	G
1	2A	1070	A
1	2A	1071	G
1	2A	1072	C
1	2A	1073	A
1	2A	1074	G
1	2A	1076	C
1	2A	1077	A
1	2A	1078	U
1	2A	1079	C
1	2A	1082	U
1	2A	1083	U
1	2A	1084	A
1	2A	1085	A
1	2A	1086	A
1	2A	1088	A
1	2A	1090	U
1	2A	1091	G
1	2A	1092	C
1	2A	1093	G
1	2A	1094	U
1	2A	1095	A
1	2A	1096	A

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Mol	Chain	Res	Type
1	2A	1098	A
1	2A	1105	U
1	2A	1108	U
1	2A	1109	C
1	2A	1110	G
1	2A	1111	A
1	2A	1112	G
1	2A	1117	G
1	2A	1128	A
1	2A	1129	A
1	2A	1130	U
1	2A	1135	C
1	2A	1136	G
1	2A	1171	G
1	2A	1195	G
1	2A	1211	U
1	2A	1212	G
1	2A	1220	A
1	2A	1230	C
1	2A	1236	G
1	2A	1253	A
1	2A	1256	G
1	2A	1271	G
1	2A	1272	A
1	2A	1300	U
1	2A	1301	A
1	2A	1303	G
1	2A	1314	C
1	2A	1319	G
1	2A	1321	A
1	2A	1342	A
1	2A	1359	A
1	2A	1360	A
1	2A	1365	A
1	2A	1368	G
1	2A	1370	C
1	2A	1384	A
1	2A	1385	G
1	2A	1386	C
1	2A	1416	G
1	2A	1417	C
1	2A	1420	U

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Mol	Chain	Res	Type
1	2A	1421	G
1	2A	1428	C
1	2A	1445	A
1	2A	1450	G
1	2A	1455	G
1	2A	1459	G
1	2A	1467	C
1	2A	1471	A
1	2A	1482	G
1	2A	1493	C
1	2A	1497	U
1	2A	1508	A
1	2A	1509	C
1	2A	1509(A)	A
1	2A	1531	C
1	2A	1533	G
1	2A	1537	G
1	2A	1542	A
1	2A	1543	C
1	2A	1547	C
1	2A	1558	A
1	2A	1566	A
1	2A	1569	A
1	2A	1578	U
1	2A	1580	A
1	2A	1584	C
1	2A	1586	A
1	2A	1593	G
1	2A	1595	G
1	2A	1608	A
1	2A	1609	A
1	2A	1610	A
1	2A	1640	C
1	2A	1648	C
1	2A	1664	A
1	2A	1674	G
1	2A	1696	G
1	2A	1700	A
1	2A	1701	A
1	2A	1721	G
1	2A	1722	A
1	2A	1756	G

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Mol	Chain	Res	Type
1	2A	1763	G
1	2A	1764	G
1	2A	1773	A
1	2A	1780	A
1	2A	1791	A
1	2A	1800	C
1	2A	1801	G
1	2A	1816	G
1	2A	1828	G
1	2A	1839	G
1	2A	1847	A
1	2A	1848	A
1	2A	1858	G
1	2A	1877	A
1	2A	1878	G
1	2A	1889	A
1	2A	1900	A
1	2A	1906	G
1	2A	1913	A
1	2A	1914	C
1	2A	1927	A
1	2A	1929	G
1	2A	1930	G
1	2A	1937	A
1	2A	1938	A
1	2A	1955	U
1	2A	1963	U
1	2A	1967	C
1	2A	1970	A
1	2A	1971	A
1	2A	1972	A
1	2A	1984	G
1	2A	1993	U
1	2A	1997	G
1	2A	2020	A
1	2A	2023	G
1	2A	2031	A
1	2A	2032	G
1	2A	2033	A
1	2A	2043	C
1	2A	2055	C
1	2A	2056	G

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Mol	Chain	Res	Type
1	2A	2060	A
1	2A	2061	G
1	2A	2069	G
1	2A	2096	U
1	2A	2103	C
1	2A	2104	G
1	2A	2105	C
1	2A	2107	C
1	2A	2108	C
1	2A	2109	U
1	2A	2110	G
1	2A	2111	C
1	2A	2113	U
1	2A	2114	A
1	2A	2115	G
1	2A	2116	G
1	2A	2117	A
1	2A	2118	U
1	2A	2119	A
1	2A	2120	G
1	2A	2123	G
1	2A	2126	A
1	2A	2127	G
1	2A	2129	C
1	2A	2131	G
1	2A	2132	U
1	2A	2133	G
1	2A	2134	A
1	2A	2136	C
1	2A	2145	C
1	2A	2146	C
1	2A	2147	G
1	2A	2148	G
1	2A	2150	U
1	2A	2151	G
1	2A	2157	G
1	2A	2158	A
1	2A	2159	G
1	2A	2160	G
1	2A	2161	C
1	2A	2163	C
1	2A	2164	C

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Mol	Chain	Res	Type
1	2A	2165	G
1	2A	2166	G
1	2A	2170	A
1	2A	2172	U
1	2A	2173	A
1	2A	2176	A
1	2A	2178	C
1	2A	2180	U
1	2A	2184	G
1	2A	2186	G
1	2A	2189	U
1	2A	2190	G
1	2A	2192	G
1	2A	2198	A
1	2A	2206	G
1	2A	2207	G
1	2A	2208	A
1	2A	2218	U
1	2A	2219	G
1	2A	2225	A
1	2A	2239	G
1	2A	2269	A
1	2A	2275	C
1	2A	2280	G
1	2A	2283	C
1	2A	2287	A
1	2A	2289	G
1	2A	2292	C
1	2A	2305	A
1	2A	2308	G
1	2A	2312	U
1	2A	2316	C
1	2A	2320	A
1	2A	2321	G
1	2A	2322	A
1	2A	2325	G
1	2A	2334	G
1	2A	2335	A
1	2A	2336	A
1	2A	2343	C
1	2A	2347	C
1	2A	2350	C

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Mol	Chain	Res	Type
1	2A	2383	G
1	2A	2385	C
1	2A	2406	U
1	2A	2410	G
1	2A	2414	G
1	2A	2422	A
1	2A	2423	U
1	2A	2425	A
1	2A	2429	G
1	2A	2430	A
1	2A	2435	A
1	2A	2439	A
1	2A	2440	C
1	2A	2441	C
1	2A	2448	A
1	2A	2468	G
1	2A	2473	U
1	2A	2474	C
1	2A	2476	A
1	2A	2491	U
1	2A	2492	U
1	2A	2494	G
1	2A	2502	G
1	2A	2504	U
1	2A	2505	G
1	2A	2506	U
1	2A	2518	A
1	2A	2529	G
1	2A	2554	U
1	2A	2566	A
1	2A	2567	G
1	2A	2573	C
1	2A	2602	A
1	2A	2603	G
1	2A	2609	U
1	2A	2611	U
1	2A	2612	C
1	2A	2615	U
1	2A	2629	A
1	2A	2630	G
1	2A	2654	A
1	2A	2663	G

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Mol	Chain	Res	Type
1	2A	2682	U
1	2A	2689	U
1	2A	2690	C
1	2A	2702	U
1	2A	2703	C
1	2A	2712(A)	A
1	2A	2713	A
1	2A	2714	G
1	2A	2726	U
1	2A	2733	A
1	2A	2757	A
1	2A	2764	A
1	2A	2765	A
1	2A	2778	A
1	2A	2793	G
1	2A	2818	G
1	2A	2820	A
1	2A	2821	A
1	2A	2835	A
1	2A	2872	G
1	2A	2873	A
1	2A	2880	C
1	2A	2891	G
1	2A	2894	G
1	2A	2896	C
1	2A	2897	U
2	2B	2	C
2	2B	7	G
2	2B	8	U
2	2B	13	A
2	2B	30	C
2	2B	31	C
2	2B	33	G
2	2B	34	U
2	2B	35	U
2	2B	41	U
2	2B	42	C
2	2B	45	A
2	2B	51	G
2	2B	56	G
2	2B	73	A
2	2B	84	C

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Mol	Chain	Res	Type
2	2B	110	G
32	2a	5	U
32	2a	9	G
32	2a	22	G
32	2a	32	A
32	2a	39	G
32	2a	44	G
32	2a	47	C
32	2a	48	C
32	2a	50	A
32	2a	51	A
32	2a	61	G
32	2a	66	G
32	2a	89	C
32	2a	101	A
32	2a	116	A
32	2a	121	C
32	2a	129(A)	G
32	2a	131	C
32	2a	142	G
32	2a	163	C
32	2a	173	U
32	2a	174	C
32	2a	182	U
32	2a	189(C)	C
32	2a	189(F)	U
32	2a	195	A
32	2a	197	A
32	2a	202	U
32	2a	203	U
32	2a	204	U
32	2a	216	G
32	2a	220	G
32	2a	227	G
32	2a	231	G
32	2a	240	C
32	2a	247	G
32	2a	251	G
32	2a	258	G
32	2a	266	G
32	2a	267	C
32	2a	289	G

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Mol	Chain	Res	Type
32	2a	298	A
32	2a	321	A
32	2a	328	C
32	2a	329	A
32	2a	332	G
32	2a	351	G
32	2a	352	C
32	2a	353	A
32	2a	354	G
32	2a	367	U
32	2a	372	C
32	2a	373	A
32	2a	397	A
32	2a	398	C
32	2a	406	G
32	2a	411	A
32	2a	412	A
32	2a	413	G
32	2a	421	U
32	2a	429	U
32	2a	430	A
32	2a	439	A
32	2a	442	C
32	2a	446	G
32	2a	452	A
32	2a	461	A
32	2a	470	C
32	2a	471	G
32	2a	476	G
32	2a	482	A
32	2a	484	G
32	2a	485	G
32	2a	496	A
32	2a	498	U
32	2a	505	G
32	2a	506	G
32	2a	509	A
32	2a	510	A
32	2a	511	C
32	2a	518	C
32	2a	527	G7M
32	2a	532	A

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Mol	Chain	Res	Type
32	2a	533	A
32	2a	547	A
32	2a	559	A
32	2a	561	U
32	2a	564	C
32	2a	572	A
32	2a	573	A
32	2a	576	G
32	2a	589	C
32	2a	596	C
32	2a	630	G
32	2a	631	G
32	2a	650	G
32	2a	653	A
32	2a	661	G
32	2a	665	A
32	2a	666	G
32	2a	687	A
32	2a	688	G
32	2a	690	G
32	2a	695	A
32	2a	723	U
32	2a	731	G
32	2a	735	C
32	2a	749	C
32	2a	753	A
32	2a	755	G
32	2a	773	G
32	2a	774	G
32	2a	777	A
32	2a	793	U
32	2a	794	A
32	2a	815	A
32	2a	817	C
32	2a	821	G
32	2a	827	U
32	2a	828	A
32	2a	829	G
32	2a	840	C
32	2a	841	U
32	2a	851	G
32	2a	859	A

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Mol	Chain	Res	Type
32	2a	874	G
32	2a	902	G
32	2a	914	A
32	2a	919	A
32	2a	926	G
32	2a	927	G
32	2a	932	C
32	2a	934	C
32	2a	960	U
32	2a	961	U
32	2a	968	A
32	2a	969	A
32	2a	971	G
32	2a	972	C
32	2a	974	A
32	2a	975	A
32	2a	976	G
32	2a	977	A
32	2a	989	C
32	2a	990	C
32	2a	992	U
32	2a	993	G
32	2a	994	A
32	2a	997	U
32	2a	999	C
32	2a	1004	A
32	2a	1005	A
32	2a	1006	C
32	2a	1009	G
32	2a	1017	G
32	2a	1020	U
32	2a	1025	U
32	2a	1026	G
32	2a	1027	C
32	2a	1028	C
32	2a	1029	C
32	2a	1030(A)	G
32	2a	1030(B)	C
32	2a	1030(C)	G
32	2a	1030(D)	A
32	2a	1033	G
32	2a	1041	A

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Mol	Chain	Res	Type
32	2a	1043	C
32	2a	1044	A
32	2a	1053	G
32	2a	1054	C
32	2a	1065	U
32	2a	1066	C
32	2a	1068	G
32	2a	1081	G
32	2a	1093	A
32	2a	1094	G
32	2a	1095	U
32	2a	1101	A
32	2a	1117	G
32	2a	1122	U
32	2a	1123	A
32	2a	1125	U
32	2a	1127	G
32	2a	1129	C
32	2a	1130	A
32	2a	1134	G
32	2a	1136	U
32	2a	1137	C
32	2a	1138	G
32	2a	1139	G
32	2a	1140	C
32	2a	1146	A
32	2a	1147	C
32	2a	1152	A
32	2a	1154	G
32	2a	1157	A
32	2a	1159	U
32	2a	1183	A
32	2a	1184	G
32	2a	1196	U
32	2a	1197	G
32	2a	1202	G
32	2a	1213	A
32	2a	1214	C
32	2a	1224	G
32	2a	1227	A
32	2a	1238	A
32	2a	1247	U

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Mol	Chain	Res	Type
32	2a	1248	A
32	2a	1256	A
32	2a	1257	U
32	2a	1258	G
32	2a	1270	C
32	2a	1278	U
32	2a	1279	A
32	2a	1281	U
32	2a	1282	C
32	2a	1285	A
32	2a	1286	A
32	2a	1287	A
32	2a	1300	G
32	2a	1302	U
32	2a	1303	C
32	2a	1305	G
32	2a	1306	A
32	2a	1315	U
32	2a	1319	A
32	2a	1320	C
32	2a	1323	G
32	2a	1340	A
32	2a	1346	A
32	2a	1347	G
32	2a	1353	G
32	2a	1363	C
32	2a	1364	U
32	2a	1370	G
32	2a	1397	C
32	2a	1419	G
32	2a	1442	G
32	2a	1442(A)	G
32	2a	1442(B)	A
32	2a	1446	U
32	2a	1447	A
32	2a	1456	G
32	2a	1492	A
32	2a	1494	G
32	2a	1497	G
32	2a	1499	A
32	2a	1503	A
32	2a	1504	G

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Mol	Chain	Res	Type
32	2a	1506	U
32	2a	1517	G
32	2a	1520	G
32	2a	1528	U
32	2a	1529	G
32	2a	1530	G

All (72) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	1A	196	A
1	1A	199	A
1	1A	266	G
1	1A	271(K)	U
1	1A	278	A
1	1A	746	A
1	1A	764	A
1	1A	774	A
1	1A	827	U
1	1A	839	U
1	1A	840	C
1	1A	888	C
1	1A	895	U
1	1A	974	G
1	1A	1047	G
1	1A	1065	U
1	1A	1175	U
1	1A	1176	G
1	1A	1210	A
1	1A	1300	U
1	1A	1301	A
1	1A	1442	G
1	1A	1608	A
1	1A	1653	G
1	1A	1762	A
1	1A	2111	C
1	1A	2126	A
1	1A	2238	G
1	1A	2406	U
1	1A	2422	A
1	1A	2430	A
1	1A	2439	A

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Mol	Chain	Res	Type
1	1A	2602	A
1	1A	2689	U
1	1A	2893	G
1	2A	9	U
1	2A	195	A
1	2A	196	A
1	2A	266	G
1	2A	271(M)	G
1	2A	277	C
1	2A	746	A
1	2A	752	A
1	2A	764	A
1	2A	827	U
1	2A	840	C
1	2A	856	C
1	2A	900	A
1	2A	1053	C
1	2A	1057	A
1	2A	1065	U
1	2A	1067	A
1	2A	1073	A
1	2A	1076	C
1	2A	1210	A
1	2A	1420	U
1	2A	1442	G
1	2A	1491	G
1	2A	1608	A
1	2A	1992	G
1	2A	2126	A
1	2A	2171	A
1	2A	2172	U
1	2A	2288	A
1	2A	2321	G
1	2A	2406	U
1	2A	2422	A
1	2A	2439	A
1	2A	2601	C
1	2A	2602	A
1	2A	2689	U
1	2A	2756	U

5.4 Non-standard residues in protein, DNA, RNA chains [i](#)

48 non-standard protein/DNA/RNA residues are modelled in this entry.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
32	G7M	2a	527	54,32	20,26,27	2.65	4 (20%)	17,39,42	0.88	1 (5%)
1	5MU	1A	1939	54,1	19,22,23	1.36	4 (21%)	28,32,35	2.25	6 (21%)
32	2MG	2a	1207	32	18,26,27	0.93	1 (5%)	16,38,41	0.99	1 (6%)
1	OMG	1A	2251	54,1	18,26,27	0.99	1 (5%)	19,38,41	1.18	3 (15%)
1	2MU	1A	2552	54,1	19,22,24	1.24	3 (15%)	26,31,36	1.66	6 (23%)
32	4OC	1a	1402	32	20,23,24	0.72	0	26,32,35	0.95	1 (3%)
32	PSU	2a	516	54,32	18,21,22	1.34	2 (11%)	22,30,33	1.86	5 (22%)
43	0TD	1l	92	43	7,9,10	4.90	1 (14%)	6,11,13	2.12	3 (50%)
1	5MC	1A	1942	54,1	18,22,23	0.97	2 (11%)	26,32,35	1.11	2 (7%)
32	M2G	2a	966	32	20,27,28	1.48	3 (15%)	22,40,43	0.90	2 (9%)
1	PSU	2A	1917	1	18,21,22	1.35	2 (11%)	22,30,33	1.92	3 (13%)
32	5MC	2a	1407	32	18,22,23	1.00	2 (11%)	26,32,35	1.18	3 (11%)
32	5MC	1a	967	32	18,22,23	0.95	2 (11%)	26,32,35	1.03	2 (7%)
32	2MG	1a	1207	32	18,26,27	0.90	1 (5%)	16,38,41	1.17	3 (18%)
1	2MA	1A	2503	54,1	17,25,26	0.99	0	17,37,40	1.04	2 (11%)
1	OMC	2A	1920	1	19,22,23	0.80	0	26,31,34	0.92	1 (3%)
1	5MU	2A	1939	1	19,22,23	1.50	5 (26%)	28,32,35	2.27	8 (28%)
32	UR3	2a	1498	32	19,22,23	1.04	2 (10%)	26,32,35	1.43	2 (7%)
1	5MC	1A	1962	54,1	18,22,23	1.05	2 (11%)	26,32,35	1.16	4 (15%)
1	PSU	1A	1917	54,1	18,21,22	1.38	2 (11%)	22,30,33	1.87	3 (13%)
1	5MC	2A	1962	1	18,22,23	0.92	2 (11%)	26,32,35	1.14	2 (7%)
1	2MU	2A	2552	54,1	19,22,24	1.24	3 (15%)	26,31,36	1.78	6 (23%)
1	PSU	1A	1911	1	18,21,22	1.34	2 (11%)	22,30,33	1.87	3 (13%)
1	2MA	2A	2503	54,1	17,25,26	1.00	1 (5%)	17,37,40	0.97	2 (11%)
32	MA6	2a	1518	32	19,26,27	0.80	0	18,38,41	1.41	2 (11%)
32	5MC	1a	1407	32	18,22,23	0.93	2 (11%)	26,32,35	1.19	3 (11%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
32	G7M	1a	527	54,32	20,26,27	2.58	4 (20%)	17,39,42	0.93	1 (5%)
32	5MC	2a	1404	32	18,22,23	0.96	2 (11%)	26,32,35	1.16	3 (11%)
1	PSU	2A	2605	1	18,21,22	1.40	3 (16%)	22,30,33	1.98	5 (22%)
32	5MC	1a	1404	32	18,22,23	0.96	1 (5%)	26,32,35	1.03	2 (7%)
32	5MC	2a	967	32	18,22,23	1.00	2 (11%)	26,32,35	1.11	2 (7%)
32	MA6	2a	1519	32	19,26,27	0.84	0	18,38,41	1.46	2 (11%)
32	5MC	2a	1400	32	18,22,23	0.97	2 (11%)	26,32,35	1.22	2 (7%)
1	OMC	1A	1920	54,1	19,22,23	0.83	0	26,31,34	0.84	0
43	0TD	2l	92	43	7,9,10	4.57	1 (14%)	6,11,13	1.92	3 (50%)
1	PSU	1A	2605	1	18,21,22	1.45	3 (16%)	22,30,33	1.99	5 (22%)
32	PSU	1a	516	54,32	18,21,22	1.34	2 (11%)	22,30,33	1.86	4 (18%)
32	MA6	1a	1518	32	19,26,27	0.80	0	18,38,41	1.38	2 (11%)
32	M2G	1a	966	32	20,27,28	1.34	3 (15%)	22,40,43	0.97	2 (9%)
32	4OC	2a	1402	32	20,23,24	0.77	0	26,32,35	0.93	1 (3%)
32	5MC	1a	1400	32	18,22,23	1.05	2 (11%)	26,32,35	1.22	2 (7%)
1	OMG	2A	2251	54,1	18,26,27	0.91	1 (5%)	19,38,41	1.16	2 (10%)
1	5MC	2A	1942	1	18,22,23	1.00	2 (11%)	26,32,35	1.27	3 (11%)
32	UR3	1a	1498	32	19,22,23	0.92	0	26,32,35	1.51	2 (7%)
1	PSU	2A	1911	1	18,21,22	1.36	2 (11%)	22,30,33	1.91	3 (13%)
32	MA6	1a	1519	32	19,26,27	0.79	0	18,38,41	1.38	2 (11%)
1	5MU	2A	1915	1	19,22,23	1.49	4 (21%)	28,32,35	2.21	9 (32%)
1	5MU	1A	1915	54,1	19,22,23	1.49	5 (26%)	28,32,35	2.22	9 (32%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
32	G7M	2a	527	54,32	-	2/3/25/26	0/3/3/3
1	5MU	1A	1939	54,1	-	0/7/25/26	0/2/2/2
32	2MG	2a	1207	32	-	0/5/27/28	0/3/3/3
1	OMG	1A	2251	54,1	-	0/5/27/28	0/3/3/3
1	2MU	1A	2552	54,1	-	0/9/27/28	0/2/2/2
32	4OC	1a	1402	32	-	0/9/29/30	0/2/2/2
32	PSU	2a	516	54,32	-	1/7/25/26	0/2/2/2
43	0TD	1l	92	43	-	3/7/12/14	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
1	5MC	1A	1942	54,1	-	0/7/25/26	0/2/2/2
32	M2G	2a	966	32	-	0/7/29/30	0/3/3/3
1	PSU	2A	1917	1	-	0/7/25/26	0/2/2/2
32	5MC	2a	1407	32	-	0/7/25/26	0/2/2/2
32	5MC	1a	967	32	-	0/7/25/26	0/2/2/2
32	2MG	1a	1207	32	-	0/5/27/28	0/3/3/3
1	2MA	1A	2503	54,1	-	2/3/25/26	0/3/3/3
1	OMC	2A	1920	1	-	2/9/27/28	0/2/2/2
1	5MU	2A	1939	1	-	0/7/25/26	0/2/2/2
32	UR3	2a	1498	32	-	0/7/25/26	0/2/2/2
1	5MC	1A	1962	54,1	-	2/7/25/26	0/2/2/2
1	PSU	1A	1917	54,1	-	0/7/25/26	0/2/2/2
1	5MC	2A	1962	1	-	2/7/25/26	0/2/2/2
1	2MU	2A	2552	54,1	-	2/9/27/28	0/2/2/2
1	PSU	1A	1911	1	-	0/7/25/26	0/2/2/2
1	2MA	2A	2503	54,1	-	1/3/25/26	0/3/3/3
32	MA6	2a	1518	32	-	0/7/29/30	0/3/3/3
32	5MC	1a	1407	32	-	0/7/25/26	0/2/2/2
32	G7M	1a	527	54,32	-	1/3/25/26	0/3/3/3
32	5MC	2a	1404	32	-	0/7/25/26	0/2/2/2
1	PSU	2A	2605	1	-	0/7/25/26	0/2/2/2
32	5MC	1a	1404	32	-	0/7/25/26	0/2/2/2
32	5MC	2a	967	32	-	0/7/25/26	0/2/2/2
32	MA6	2a	1519	32	-	2/7/29/30	0/3/3/3
32	5MC	2a	1400	32	-	0/7/25/26	0/2/2/2
1	OMC	1A	1920	54,1	-	1/9/27/28	0/2/2/2
43	0TD	2l	92	43	-	1/7/12/14	-
1	PSU	1A	2605	1	-	0/7/25/26	0/2/2/2
32	PSU	1a	516	54,32	-	0/7/25/26	0/2/2/2
32	MA6	1a	1518	32	-	0/7/29/30	0/3/3/3
32	M2G	1a	966	32	-	0/7/29/30	0/3/3/3
32	4OC	2a	1402	32	-	2/9/29/30	0/2/2/2
32	5MC	1a	1400	32	-	0/7/25/26	0/2/2/2
1	OMG	2A	2251	54,1	-	0/5/27/28	0/3/3/3
1	5MC	2A	1942	1	-	0/7/25/26	0/2/2/2
32	UR3	1a	1498	32	-	0/7/25/26	0/2/2/2
1	PSU	2A	1911	1	-	0/7/25/26	0/2/2/2
32	MA6	1a	1519	32	-	2/7/29/30	0/3/3/3
1	5MU	2A	1915	1	-	2/7/25/26	0/2/2/2
1	5MU	1A	1915	54,1	-	2/7/25/26	0/2/2/2

All (88) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
43	1l	92	0TD	CB-SB	-12.58	1.69	1.82
43	2l	92	0TD	CB-SB	-11.76	1.70	1.82
32	2a	527	G7M	C8-N9	7.66	1.47	1.33
32	1a	527	G7M	C8-N9	7.51	1.46	1.33
32	2a	527	G7M	C8-N7	7.03	1.45	1.33
32	1a	527	G7M	C8-N7	6.86	1.45	1.33
32	2a	966	M2G	C2-N3	4.60	1.36	1.30
32	2a	527	G7M	C5-C4	4.27	1.47	1.39
32	1a	527	G7M	C5-C4	4.12	1.47	1.39
32	1a	966	M2G	C2-N3	3.82	1.35	1.30
1	2A	2605	PSU	C6-C5	3.45	1.39	1.35
1	1A	2605	PSU	C4-N3	-3.35	1.32	1.38
1	2A	1911	PSU	C6-C5	3.34	1.39	1.35
1	1A	1917	PSU	C6-C5	3.34	1.39	1.35
1	1A	1911	PSU	C6-C5	3.32	1.39	1.35
32	1a	1400	5MC	C6-C5	3.26	1.40	1.34
32	1a	516	PSU	C6-C5	3.23	1.39	1.35
1	2A	1917	PSU	C6-C5	3.20	1.39	1.35
32	2a	516	PSU	C6-C5	3.16	1.39	1.35
1	1A	1915	5MU	C2-N1	3.06	1.43	1.38
32	1a	1404	5MC	C6-C5	3.06	1.39	1.34
1	2A	1915	5MU	C6-C5	3.02	1.39	1.34
1	2A	1915	5MU	C2-N1	2.99	1.43	1.38
1	1A	2251	OMG	C6-N1	-2.95	1.33	1.37
1	2A	1939	5MU	C6-C5	2.95	1.39	1.34
32	2a	1407	5MC	C6-C5	2.94	1.39	1.34
1	2A	1939	5MU	C4-C5	2.93	1.49	1.44
32	2a	966	M2G	C2-N2	2.93	1.40	1.35
32	2a	967	5MC	C6-C5	2.92	1.39	1.34
1	2A	1939	5MU	C4-N3	-2.87	1.33	1.38
1	1A	1915	5MU	C4-N3	-2.85	1.33	1.38
1	1A	1939	5MU	C6-C5	2.85	1.39	1.34
1	1A	2605	PSU	C6-C5	2.77	1.38	1.35
1	1A	1939	5MU	C4-N3	-2.77	1.33	1.38
32	1a	966	M2G	C6-N1	-2.74	1.33	1.37
32	2a	1404	5MC	C6-C5	2.74	1.39	1.34
1	1A	1962	5MC	C6-N1	-2.74	1.33	1.38
1	1A	1915	5MU	C6-C5	2.73	1.39	1.34
32	2a	1400	5MC	C6-C5	2.69	1.39	1.34
1	2A	1942	5MC	C6-C5	2.68	1.39	1.34
1	1A	1942	5MC	C6-C5	2.67	1.39	1.34
32	1a	1407	5MC	C6-C5	2.65	1.38	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	1a	967	5MC	C6-C5	2.64	1.38	1.34
1	2A	2552	2MU	C4-N3	-2.64	1.33	1.38
1	2A	2605	PSU	C4-N3	-2.62	1.34	1.38
1	1A	2552	2MU	C4-N3	-2.62	1.33	1.38
1	2A	1911	PSU	C4-N3	-2.61	1.34	1.38
1	1A	1917	PSU	C4-N3	-2.58	1.34	1.38
1	2A	1915	5MU	C4-N3	-2.56	1.34	1.38
1	2A	1917	PSU	C4-N3	-2.53	1.34	1.38
32	1a	966	M2G	C2-N2	2.52	1.39	1.35
32	2a	527	G7M	C6-N1	-2.52	1.34	1.37
1	2A	1962	5MC	C6-C5	2.51	1.38	1.34
1	1A	1939	5MU	C6-N1	-2.51	1.33	1.38
32	2a	516	PSU	C4-N3	-2.51	1.34	1.38
1	1A	1911	PSU	C4-N3	-2.49	1.34	1.38
1	1A	1962	5MC	C6-C5	2.49	1.38	1.34
1	2A	1915	5MU	C4-C5	2.48	1.48	1.44
1	2A	1942	5MC	C6-N1	-2.45	1.33	1.38
1	2A	1939	5MU	C6-N1	-2.42	1.33	1.38
32	2a	1400	5MC	C6-N1	-2.42	1.33	1.38
32	2a	966	M2G	C6-N1	-2.41	1.34	1.37
1	2A	2251	OMG	C6-N1	-2.41	1.34	1.37
32	1a	1207	2MG	C6-N1	-2.40	1.34	1.37
1	1A	1942	5MC	C6-N1	-2.40	1.34	1.38
1	1A	1915	5MU	C4-C5	2.39	1.48	1.44
32	2a	1207	2MG	C6-N1	-2.38	1.34	1.37
1	2A	1962	5MC	C6-N1	-2.37	1.34	1.38
32	1a	516	PSU	C4-N3	-2.37	1.34	1.38
1	2A	2503	2MA	C2-N3	2.31	1.36	1.31
1	2A	2605	PSU	C2-N3	-2.29	1.33	1.37
1	1A	1939	5MU	C2-N3	-2.24	1.34	1.38
32	1a	967	5MC	C6-N1	-2.23	1.34	1.38
32	1a	527	G7M	C6-N1	-2.21	1.34	1.37
32	2a	1498	UR3	C6-C5	2.21	1.40	1.35
1	1A	2552	2MU	C5-C4	2.21	1.48	1.43
1	2A	2552	2MU	C2-N3	-2.17	1.34	1.38
32	1a	1400	5MC	C6-N1	-2.17	1.34	1.38
1	1A	2605	PSU	C2-N3	-2.16	1.33	1.37
32	2a	1404	5MC	C6-N1	-2.16	1.34	1.38
1	2A	1939	5MU	C2-N3	-2.15	1.34	1.38
32	2a	1498	UR3	C2-N1	2.14	1.41	1.38
32	2a	1407	5MC	C6-N1	-2.13	1.34	1.38
1	1A	2552	2MU	C2-N3	-2.12	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	1A	1915	5MU	C2-N3	-2.11	1.34	1.38
1	2A	2552	2MU	C5-C4	2.09	1.48	1.43
32	1a	1407	5MC	C6-N1	-2.06	1.34	1.38
32	2a	967	5MC	C6-N1	-2.01	1.34	1.38

All (145) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1A	2605	PSU	N1-C2-N3	6.48	122.48	115.13
1	2A	2605	PSU	N1-C2-N3	6.30	122.27	115.13
32	1a	1498	UR3	C4-N3-C2	-6.26	118.67	124.56
1	2A	1911	PSU	N1-C2-N3	6.14	122.08	115.13
1	2A	1917	PSU	N1-C2-N3	6.12	122.06	115.13
1	1A	1917	PSU	N1-C2-N3	5.94	121.86	115.13
1	2A	1939	5MU	C4-N3-C2	-5.80	119.85	127.35
1	1A	1911	PSU	N1-C2-N3	5.79	121.69	115.13
32	2a	516	PSU	N1-C2-N3	5.76	121.65	115.13
1	2A	1939	5MU	N3-C2-N1	5.70	122.46	114.89
1	1A	1939	5MU	C4-N3-C2	-5.68	120.00	127.35
32	2a	1498	UR3	C4-N3-C2	-5.61	119.28	124.56
32	1a	516	PSU	N1-C2-N3	5.59	121.46	115.13
1	1A	1915	5MU	N3-C2-N1	5.51	122.21	114.89
1	1A	1939	5MU	N3-C2-N1	5.28	121.89	114.89
1	2A	1915	5MU	N3-C2-N1	5.20	121.79	114.89
1	1A	1915	5MU	C4-N3-C2	-4.97	120.92	127.35
1	1A	1939	5MU	C5-C4-N3	4.91	119.50	115.31
1	2A	2552	2MU	N3-C2-N1	4.81	121.27	114.89
1	2A	1915	5MU	C4-N3-C2	-4.81	121.13	127.35
32	2a	1519	MA6	N3-C2-N1	-4.71	121.31	128.68
1	1A	2552	2MU	N3-C2-N1	4.67	121.08	114.89
1	2A	1939	5MU	C5-C4-N3	4.63	119.26	115.31
32	2a	1518	MA6	N3-C2-N1	-4.61	121.47	128.68
32	1a	1519	MA6	N3-C2-N1	-4.49	121.66	128.68
32	1a	1518	MA6	N3-C2-N1	-4.30	121.96	128.68
1	2A	1942	5MC	C5-C6-N1	-4.29	118.92	123.34
1	2A	1939	5MU	C5-C6-N1	-4.28	118.94	123.34
1	2A	2605	PSU	C4-N3-C2	-4.28	120.18	126.34
1	1A	1939	5MU	O4-C4-C5	-4.24	119.98	124.90
1	1A	1915	5MU	C5-C4-N3	4.23	118.92	115.31
1	1A	1939	5MU	C5-C6-N1	-4.22	119.00	123.34
1	1A	2605	PSU	C4-N3-C2	-4.19	120.30	126.34
32	1a	1400	5MC	C5-C6-N1	-4.18	119.04	123.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2A	1915	5MU	C1'-N1-C2	4.01	124.83	117.57
1	2A	2552	2MU	C4-N3-C2	-3.99	121.31	126.58
1	2A	1915	5MU	C5-C4-N3	3.99	118.71	115.31
32	2a	1400	5MC	C5-C6-N1	-3.97	119.25	123.34
1	2A	1911	PSU	C4-N3-C2	-3.95	120.64	126.34
32	2a	516	PSU	C4-N3-C2	-3.92	120.69	126.34
1	1A	1911	PSU	C4-N3-C2	-3.91	120.71	126.34
1	2A	1917	PSU	O2-C2-N1	-3.89	118.50	122.79
32	1a	516	PSU	C4-N3-C2	-3.87	120.76	126.34
32	2a	967	5MC	C5-C6-N1	-3.84	119.39	123.34
1	1A	1915	5MU	C1'-N1-C2	3.82	124.48	117.57
1	1A	2552	2MU	C4-N3-C2	-3.80	121.57	126.58
1	2A	1917	PSU	C4-N3-C2	-3.76	120.92	126.34
1	1A	1917	PSU	C4-N3-C2	-3.73	120.96	126.34
1	2A	1962	5MC	C5-C6-N1	-3.70	119.53	123.34
1	1A	1942	5MC	C5-C6-N1	-3.64	119.59	123.34
1	2A	1915	5MU	O4-C4-C5	-3.64	120.68	124.90
1	2A	2552	2MU	C2'-C1'-N1	-3.61	107.21	114.22
1	1A	1939	5MU	O2-C2-N1	-3.54	118.07	122.79
1	1A	1911	PSU	O2-C2-N1	-3.50	118.94	122.79
1	1A	1917	PSU	O2-C2-N1	-3.46	118.98	122.79
32	2a	1404	5MC	C5-C6-N1	-3.40	119.84	123.34
32	1a	516	PSU	O2-C2-N1	-3.38	119.07	122.79
43	1l	92	0TD	OD2-CG-CB	3.38	120.44	113.15
1	2A	1911	PSU	O2-C2-N1	-3.37	119.08	122.79
32	2a	1519	MA6	C4-C5-N7	-3.34	105.92	109.40
1	1A	2552	2MU	O2-C2-N1	-3.33	118.36	122.79
1	1A	1915	5MU	O4-C4-C5	-3.31	121.06	124.90
32	1a	1404	5MC	C5-C6-N1	-3.31	119.93	123.34
32	2a	1407	5MC	C5-C6-N1	-3.31	119.94	123.34
43	2l	92	0TD	OD2-CG-CB	3.22	120.10	113.15
1	2A	1939	5MU	O4-C4-C5	-3.15	121.25	124.90
1	2A	1915	5MU	C1'-N1-C6	-3.11	115.95	121.12
32	1a	967	5MC	C5-C6-N1	-3.09	120.16	123.34
1	1A	1915	5MU	O2-C2-N3	-3.06	115.80	121.50
32	1a	1400	5MC	C5-C4-N3	-3.04	118.39	121.67
32	2a	1518	MA6	C4-C5-N7	-3.02	106.25	109.40
32	2a	1404	5MC	C5-C4-N3	-3.00	118.43	121.67
32	1a	1518	MA6	C4-C5-N7	-2.99	106.28	109.40
1	2A	1939	5MU	O2-C2-N1	-2.99	118.81	122.79
32	1a	1407	5MC	C5-C6-N1	-2.98	120.28	123.34
32	1a	1519	MA6	C4-C5-N7	-2.97	106.30	109.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	2a	1407	5MC	C5-C4-N3	-2.92	118.53	121.67
1	1A	2251	OMG	C5-C6-N1	2.90	119.07	113.95
32	2a	516	PSU	O2-C2-N1	-2.81	119.70	122.79
1	1A	1962	5MC	C5-C4-N3	-2.78	118.67	121.67
1	1A	1915	5MU	C5-C6-N1	-2.77	120.48	123.34
32	2a	527	G7M	CN7-N7-C8	-2.76	112.13	125.43
1	2A	1915	5MU	C5-C6-N1	-2.72	120.54	123.34
43	1l	92	0TD	CSB-SB-CB	2.71	107.35	102.44
1	2A	2552	2MU	O2-C2-N1	-2.71	119.19	122.79
1	2A	2552	2MU	C5-C4-N3	2.69	118.86	114.84
32	1a	527	G7M	CN7-N7-C8	-2.68	112.55	125.43
1	1A	2605	PSU	O2-C2-N1	-2.67	119.85	122.79
1	2A	2605	PSU	O2-C2-N1	-2.66	119.86	122.79
1	1A	1915	5MU	C1'-N1-C6	-2.66	116.70	121.12
1	1A	2552	2MU	C2'-C1'-N1	-2.65	109.07	114.22
1	2A	1915	5MU	O2-C2-N3	-2.56	116.73	121.50
1	1A	2503	2MA	C8-N7-C5	2.56	107.86	102.99
32	1a	1407	5MC	C5-C4-N3	-2.53	118.95	121.67
1	2A	1942	5MC	C5-C4-N3	-2.51	118.96	121.67
1	1A	2605	PSU	C5-C6-N1	-2.50	118.36	122.11
1	2A	2503	2MA	C5-C6-N1	2.45	118.25	114.02
1	1A	1915	5MU	C6-N1-C2	-2.44	118.82	121.30
32	1a	1498	UR3	C3U-N3-C2	2.44	121.60	117.31
1	1A	2552	2MU	O4-C4-C5	-2.44	120.86	125.16
1	2A	2251	OMG	C5-C6-N1	2.44	118.25	113.95
1	2A	1962	5MC	C5-C4-N3	-2.42	119.06	121.67
1	1A	1962	5MC	CM5-C5-C6	-2.42	119.62	122.85
32	2a	1407	5MC	O2-C2-N3	-2.42	118.40	122.33
1	2A	2503	2MA	C8-N7-C5	2.42	107.59	102.99
32	1a	1207	2MG	C8-N7-C5	2.41	107.58	102.99
1	1A	1942	5MC	C5-C4-N3	-2.40	119.09	121.67
1	1A	2251	OMG	C8-N7-C5	2.39	107.54	102.99
32	1a	1407	5MC	O2-C2-N3	-2.38	118.46	122.33
1	2A	2552	2MU	O4-C4-C5	-2.36	121.01	125.16
1	2A	2251	OMG	C8-N7-C5	2.35	107.47	102.99
32	2a	516	PSU	O4'-C1'-C2'	2.35	108.46	105.14
43	2l	92	0TD	OD1-CG-CB	-2.34	117.54	122.44
32	1a	1402	4OC	C6-C5-C4	2.34	119.82	116.96
1	1A	2552	2MU	C5-C4-N3	2.34	118.34	114.84
1	2A	1939	5MU	C5M-C5-C4	2.34	121.34	118.77
32	1a	1207	2MG	C5-C6-N1	2.33	118.06	113.95
1	2A	1920	OMC	O2-C2-N3	-2.32	118.55	122.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2A	1942	5MC	CM5-C5-C6	-2.31	119.76	122.85
1	1A	1962	5MC	C5-C6-N1	-2.29	120.98	123.34
1	2A	2605	PSU	C5-C6-N1	-2.29	118.68	122.11
1	1A	1962	5MC	C1'-N1-C6	-2.28	117.34	121.12
32	2a	1207	2MG	C8-N7-C5	2.26	107.30	102.99
32	1a	966	M2G	C5-C6-N1	2.26	117.94	113.95
32	1a	1404	5MC	C5-C4-N3	-2.26	119.24	121.67
32	2a	1400	5MC	C5-C4-N3	-2.23	119.27	121.67
32	1a	967	5MC	C5-C4-N3	-2.22	119.28	121.67
32	2a	966	M2G	C8-N7-C5	2.22	107.22	102.99
32	2a	966	M2G	C5-C6-N1	2.20	117.83	113.95
1	1A	2605	PSU	O2-C2-N3	-2.20	117.67	121.82
1	2A	1939	5MU	C5M-C5-C6	-2.20	119.92	122.85
32	2a	967	5MC	C5-C4-N3	-2.16	119.34	121.67
32	2a	1498	UR3	C6-N1-C2	-2.14	119.87	121.79
1	1A	2503	2MA	C5-C6-N1	2.12	117.68	114.02
32	1a	966	M2G	C8-N7-C5	2.11	107.01	102.99
43	1l	92	0TD	OD1-CG-CB	-2.10	118.04	122.44
1	2A	2605	PSU	O2-C2-N3	-2.10	117.86	121.82
1	1A	2251	OMG	O6-C6-C5	-2.08	120.31	124.37
32	2a	1402	4OC	C6-C5-C4	2.07	119.49	116.96
1	2A	1915	5MU	C6-N1-C2	-2.06	119.21	121.30
43	2l	92	0TD	CSB-SB-CB	-2.06	98.72	102.44
32	1a	516	PSU	O4'-C1'-C2'	2.04	108.02	105.14
32	1a	1207	2MG	CM2-N2-C2	-2.04	119.36	123.86
32	2a	516	PSU	C5-C6-N1	-2.03	119.06	122.11
32	2a	1404	5MC	O2-C2-N3	-2.00	119.07	122.33

There are no chirality outliers.

All (30) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
1	1A	1915	5MU	O4'-C1'-N1-C2
1	1A	1915	5MU	O4'-C1'-N1-C6
43	1l	92	0TD	O-C-CA-CB
43	1l	92	0TD	CG-CB-SB-CSB
1	2A	1915	5MU	O4'-C1'-N1-C2
1	2A	1915	5MU	O4'-C1'-N1-C6
32	2a	527	G7M	C3'-C4'-C5'-O5'
32	2a	1519	MA6	O4'-C4'-C5'-O5'
32	1a	1519	MA6	O4'-C4'-C5'-O5'
32	2a	1519	MA6	C3'-C4'-C5'-O5'

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Mol	Chain	Res	Type	Atoms
32	1a	1519	MA6	C3'-C4'-C5'-O5'
32	2a	527	G7M	O4'-C4'-C5'-O5'
32	2a	1402	4OC	O4'-C4'-C5'-O5'
1	2A	2552	2MU	C1'-C2'-O2'-C6'
43	2l	92	0TD	CG-CB-SB-CSB
32	1a	527	G7M	C3'-C4'-C5'-O5'
1	2A	1962	5MC	C2'-C1'-N1-C6
1	1A	2503	2MA	C4'-C5'-O5'-P
1	2A	2552	2MU	C3'-C2'-O2'-C6'
32	2a	1402	4OC	C3'-C4'-C5'-O5'
32	2a	516	PSU	O4'-C1'-C5-C4
1	2A	1920	OMC	C3'-C2'-O2'-CM2
1	2A	1962	5MC	O4'-C1'-N1-C6
43	1l	92	0TD	CA-CB-SB-CSB
1	1A	1962	5MC	C2'-C1'-N1-C6
1	1A	1962	5MC	O4'-C1'-N1-C6
1	2A	1920	OMC	C2'-C1'-N1-C2
1	1A	1920	OMC	C2'-C1'-N1-C2
1	1A	2503	2MA	O4'-C4'-C5'-O5'
1	2A	2503	2MA	O4'-C4'-C5'-O5'

There are no ring outliers.

No monomer is involved in short contacts.

5.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 2534 ligands modelled in this entry, 2519 are monoatomic - leaving 15 for Mogul analysis.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
57	MPD	18	103	-	7,7,7	0.29	0	9,10,10	0.38	0
55	HGR	2A	3731	-	39,39,39	2.43	10 (25%)	50,58,58	1.69	15 (30%)
56	ERY	2A	3732	-	53,53,53	0.93	2 (3%)	82,82,82	1.37	8 (9%)
57	MPD	1a	1880	32	7,7,7	0.42	0	9,10,10	0.57	0
58	ARG	1F	319	-	10,11,11	0.71	0	11,13,13	1.06	2 (18%)
56	ERY	1A	4042	-	53,53,53	0.92	2 (3%)	82,82,82	1.29	9 (10%)
57	MPD	1A	4043	-	7,7,7	0.30	0	9,10,10	0.22	0
57	MPD	1T	206	-	7,7,7	0.34	0	9,10,10	0.22	0
60	SF4	1d	306	35	0,12,12	-	-	-	-	-
60	SF4	2d	501	35	0,12,12	-	-	-	-	-
55	HGR	1A	4041	-	39,39,39	2.40	8 (20%)	50,58,58	1.83	15 (30%)
57	MPD	2A	3734	-	7,7,7	0.30	0	9,10,10	0.19	0
58	ARG	1B	230	54	10,11,11	0.77	1 (10%)	11,13,13	1.03	1 (9%)
57	MPD	2B	219	-	7,7,7	0.31	0	9,10,10	0.17	0
57	MPD	2A	3733	-	7,7,7	0.37	0	9,10,10	0.47	0

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
57	MPD	18	103	-	-	3/5/5/5	-
55	HGR	2A	3731	-	-	5/20/79/79	0/4/4/4
56	ERY	2A	3732	-	-	4/72/107/107	0/3/3/3
57	MPD	1a	1880	32	-	4/5/5/5	-
58	ARG	1F	319	-	-	2/11/11/11	-
56	ERY	1A	4042	-	-	0/72/107/107	0/3/3/3
57	MPD	1A	4043	-	-	2/5/5/5	-
57	MPD	1T	206	-	-	0/5/5/5	-
60	SF4	1d	306	35	-	-	0/6/5/5
60	SF4	2d	501	35	-	-	0/6/5/5
55	HGR	1A	4041	-	-	5/20/79/79	0/4/4/4
57	MPD	2A	3734	-	-	2/5/5/5	-
58	ARG	1B	230	54	-	0/11/11/11	-
57	MPD	2B	219	-	-	2/5/5/5	-
57	MPD	2A	3733	-	-	0/5/5/5	-

All (23) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
55	2A	3731	HGR	C12-C14	9.50	1.55	1.33
55	1A	4041	HGR	C12-C14	8.98	1.54	1.33
55	1A	4041	HGR	C5-C4	-5.33	1.39	1.49
55	1A	4041	HGR	C5-C6	-5.31	1.39	1.50
55	2A	3731	HGR	C5-C6	-5.25	1.39	1.50
55	2A	3731	HGR	C5-C4	-5.19	1.39	1.49
56	2A	3732	ERY	O2-C1	4.93	1.45	1.34
56	1A	4042	ERY	O2-C1	4.73	1.45	1.34
55	2A	3731	HGR	C3-C2	-4.70	1.39	1.48
55	1A	4041	HGR	C3-C2	-4.56	1.39	1.48
55	2A	3731	HGR	O4-C2	4.32	1.36	1.24
55	1A	4041	HGR	O4-C2	4.22	1.35	1.24
55	1A	4041	HGR	C1-C6	2.78	1.39	1.35
56	1A	4042	ERY	O2-C13	-2.74	1.41	1.46
55	2A	3731	HGR	C1-C6	2.70	1.39	1.35
55	2A	3731	HGR	O8-C23	2.47	1.45	1.41
55	1A	4041	HGR	O8-C23	2.45	1.45	1.41
55	1A	4041	HGR	O1-C10	2.29	1.45	1.41
56	2A	3732	ERY	O2-C13	-2.18	1.42	1.46
58	1B	230	ARG	OXT-C	-2.10	1.23	1.30
55	2A	3731	HGR	O1-C10	2.03	1.45	1.41
55	2A	3731	HGR	C1-C2	-2.03	1.39	1.44
55	2A	3731	HGR	C8-C7	-2.01	1.51	1.53

All (50) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
55	2A	3731	HGR	C4-C5-C6	4.67	122.42	112.36
55	1A	4041	HGR	C4-C5-C6	4.51	122.08	112.36
55	1A	4041	HGR	C12-C6-C1	-3.88	115.74	119.31
56	2A	3732	ERY	O5-C16-C17	3.84	109.51	103.81
56	2A	3732	ERY	C13-O2-C1	-3.65	111.68	118.18
56	2A	3732	ERY	C6-C5-C4	-3.64	108.89	114.05
55	1A	4041	HGR	O9-C22-C18	-3.47	98.20	105.97
56	1A	4042	ERY	O7-C5-C6	3.45	110.64	106.39
55	1A	4041	HGR	O1-C10-C9	-3.45	100.54	104.98
55	1A	4041	HGR	C4-C3-C2	-3.41	118.69	121.83
55	2A	3731	HGR	C12-C6-C1	-3.41	116.17	119.31
55	1A	4041	HGR	C8-C7-C11	-3.26	107.95	113.67
56	1A	4042	ERY	O7-C5-C4	-3.24	106.69	111.54
56	1A	4042	ERY	O2-C1-C2	3.19	118.56	111.56
55	2A	3731	HGR	O1-C10-C9	-3.16	100.91	104.98
56	2A	3732	ERY	O5-C16-C15	-3.15	107.91	112.96

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
56	2A	3732	ERY	O2-C1-C2	3.13	118.43	111.56
55	2A	3731	HGR	O4-C2-C3	-3.06	116.51	121.30
56	1A	4042	ERY	C6-C5-C4	-3.00	109.81	114.05
55	1A	4041	HGR	C23-O9-C22	-2.99	101.75	106.31
55	2A	3731	HGR	O8-C18-C22	-2.98	99.30	105.97
55	1A	4041	HGR	O8-C18-C22	-2.95	99.37	105.97
56	2A	3732	ERY	O3-C3-C4	2.93	111.75	108.22
55	1A	4041	HGR	O3-C10-C9	2.87	111.63	106.78
55	2A	3731	HGR	C4-C3-C2	-2.86	119.20	121.83
56	1A	4042	ERY	O5-C16-C17	2.83	108.00	103.81
56	1A	4042	ERY	O5-C16-C15	-2.80	108.47	112.96
55	1A	4041	HGR	C1-C2-C3	2.77	121.33	115.99
55	2A	3731	HGR	C8-C7-C11	-2.74	108.85	113.67
55	2A	3731	HGR	C1-C2-C3	2.73	121.26	115.99
56	1A	4042	ERY	C13-O2-C1	-2.70	113.38	118.18
55	1A	4041	HGR	O3-C3-C2	2.65	117.60	112.56
55	2A	3731	HGR	C23-O9-C22	-2.62	102.32	106.31
56	1A	4042	ERY	C32-C6-C5	2.60	114.69	110.12
55	2A	3731	HGR	O9-C22-C18	-2.52	100.32	105.97
55	2A	3731	HGR	C10-C9-C8	-2.52	99.10	102.30
56	2A	3732	ERY	C2-C3-C4	-2.49	105.86	113.05
58	1F	319	ARG	OXT-C-O	-2.46	118.50	124.09
55	1A	4041	HGR	C10-C9-C8	-2.46	99.18	102.30
58	1B	230	ARG	OXT-C-O	-2.43	118.56	124.09
55	1A	4041	HGR	O4-C2-C3	-2.38	117.58	121.30
55	2A	3731	HGR	O3-C10-C9	2.28	110.64	106.78
58	1F	319	ARG	OXT-C-CA	2.28	121.14	113.38
55	2A	3731	HGR	C19-C17-N1	2.12	114.62	110.62
55	2A	3731	HGR	C5-C6-C1	-2.12	117.55	121.34
56	2A	3732	ERY	C27-C26-C25	-2.10	110.11	113.40
56	1A	4042	ERY	C2-C3-C4	-2.09	107.00	113.05
55	2A	3731	HGR	O3-C3-C2	2.07	116.49	112.56
55	1A	4041	HGR	C19-C17-N1	2.06	114.51	110.62
55	1A	4041	HGR	C5-C6-C1	-2.03	117.70	121.34

There are no chirality outliers.

All (29) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
55	1A	4041	HGR	C2-C3-O3-C10
55	2A	3731	HGR	C2-C3-O3-C10
56	2A	3732	ERY	C15-C16-O5-C20

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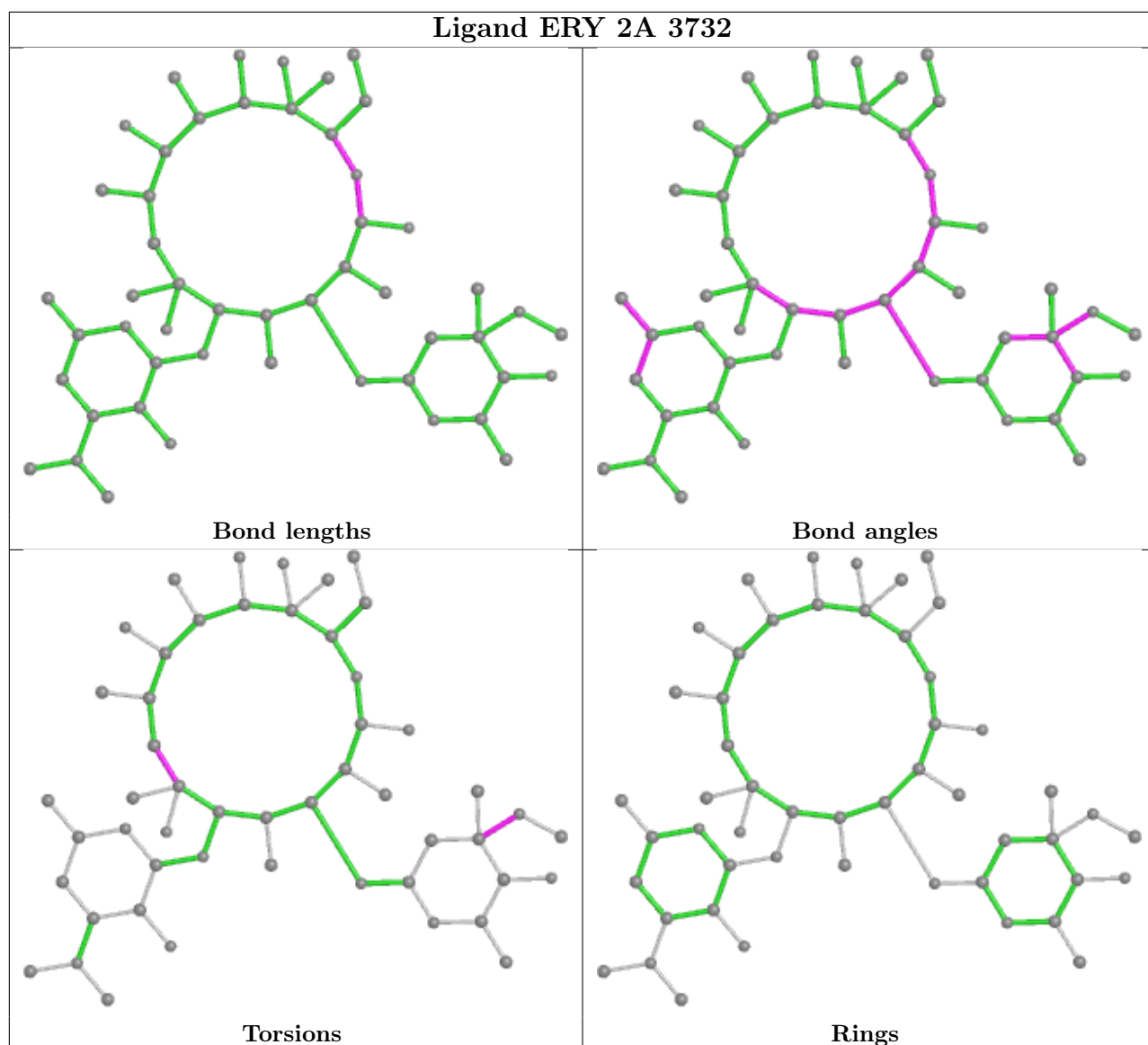
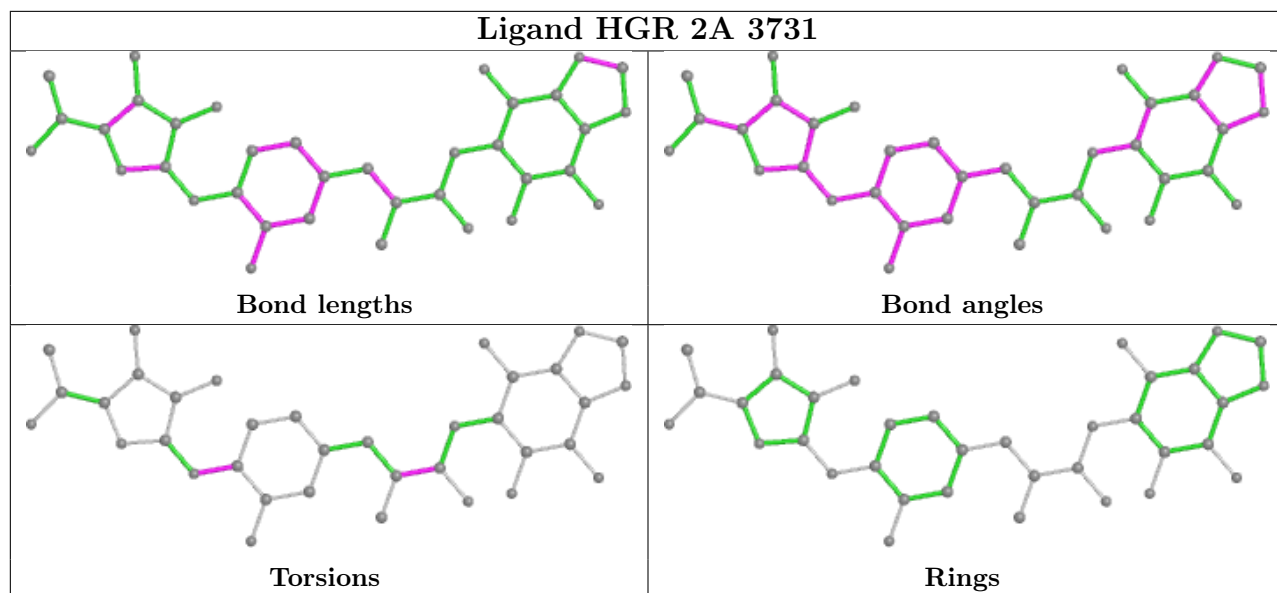
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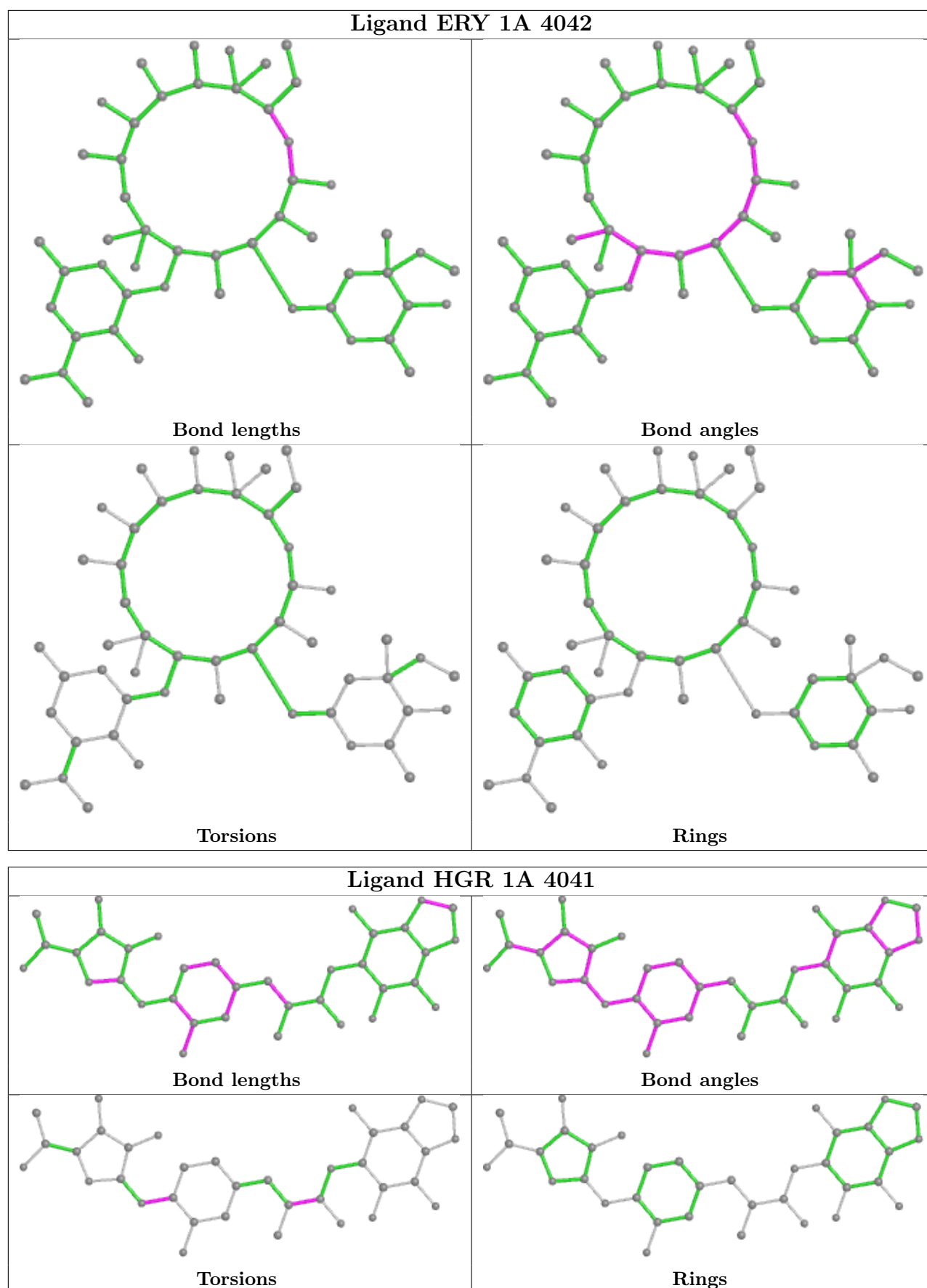
Mol	Chain	Res	Type	Atoms
56	2A	3732	ERY	C19-C16-O5-C20
57	18	103	MPD	C2-C3-C4-O4
57	2B	219	MPD	C2-C3-C4-O4
56	2A	3732	ERY	C17-C16-O5-C20
57	18	103	MPD	C2-C3-C4-C5
57	1a	1880	MPD	C2-C3-C4-C5
58	1F	319	ARG	OXT-C-CA-CB
55	1A	4041	HGR	C12-C14-C15-O7
55	2A	3731	HGR	C12-C14-C15-O7
55	2A	3731	HGR	C12-C14-C15-N1
57	1a	1880	MPD	C1-C2-C3-C4
58	1F	319	ARG	O-C-CA-CB
55	1A	4041	HGR	C16-C14-C15-O7
55	2A	3731	HGR	C16-C14-C15-O7
55	2A	3731	HGR	C16-C14-C15-N1
55	1A	4041	HGR	C12-C14-C15-N1
56	2A	3732	ERY	C32-C6-C7-C8
57	18	103	MPD	O2-C2-C3-C4
57	1a	1880	MPD	O2-C2-C3-C4
57	2A	3734	MPD	O2-C2-C3-C4
55	1A	4041	HGR	C16-C14-C15-N1
57	1A	4043	MPD	C2-C3-C4-C5
57	2A	3734	MPD	C2-C3-C4-C5
57	2B	219	MPD	C2-C3-C4-C5
57	1A	4043	MPD	C2-C3-C4-O4
57	1a	1880	MPD	C2-C3-C4-O4

There are no ring outliers.

No monomer is involved in short contacts.

The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less than 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.





5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

6 Fit of model and data i

6.1 Protein, DNA and RNA chains i

In the following table, the column labelled ‘#RSRZ> 2’ contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 95th percentile and maximum values of the occupancy-weighted average B-factor per residue. The column labelled ‘Q< 0.9’ lists the number of (and percentage) of residues with an average occupancy less than 0.9.

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	1A	2861/2915 (98%)	0.79	76 (2%) 54 58	26, 43, 97, 110	0
1	2A	2856/2915 (97%)	0.54	121 (4%) 36 39	39, 63, 100, 111	0
2	1B	120/121 (99%)	0.42	0 100 100	37, 55, 69, 84	0
2	2B	120/121 (99%)	0.42	8 (6%) 17 18	68, 88, 96, 98	0
3	1D	275/276 (99%)	0.93	6 (2%) 62 65	27, 43, 56, 79	0
3	2D	275/276 (99%)	0.97	24 (8%) 10 10	36, 56, 68, 82	0
4	1E	204/206 (99%)	0.92	4 (1%) 65 68	26, 46, 64, 79	0
4	2E	204/206 (99%)	0.79	13 (6%) 19 20	38, 62, 75, 85	0
5	1F	203/210 (96%)	0.80	0 100 100	24, 48, 72, 87	0
5	2F	203/210 (96%)	0.60	5 (2%) 57 61	41, 73, 83, 92	0
6	1G	181/182 (99%)	0.56	4 (2%) 62 65	52, 68, 81, 90	0
6	2G	181/182 (99%)	2.75	111 (61%) 0 0	81, 89, 94, 97	0
7	1H	174/180 (96%)	0.57	1 (0%) 89 90	43, 58, 70, 79	0
7	2H	173/180 (96%)	1.32	43 (24%) 0 0	74, 84, 90, 94	0
8	1I	147/148 (99%)	0.39	3 (2%) 65 68	48, 76, 85, 87	0
8	2I	146/148 (98%)	0.71	20 (13%) 3 2	58, 78, 87, 91	0
9	1N	140/140 (100%)	0.92	1 (0%) 87 89	33, 44, 65, 80	0
9	2N	140/140 (100%)	0.84	10 (7%) 16 16	50, 69, 81, 84	0
10	1O	122/122 (100%)	0.87	4 (3%) 46 50	37, 45, 65, 68	0
10	2O	122/122 (100%)	0.69	3 (2%) 57 61	50, 60, 72, 78	0
11	1P	149/150 (99%)	0.69	1 (0%) 87 89	26, 50, 71, 83	0
11	2P	149/150 (99%)	0.71	9 (6%) 21 22	43, 71, 86, 90	0
12	1Q	141/141 (100%)	0.85	4 (2%) 53 56	33, 45, 59, 72	0
12	2Q	141/141 (100%)	0.92	16 (11%) 5 4	52, 71, 79, 87	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
13	1R	118/118 (100%)	0.87	1 (0%) 86 87	33, 42, 58, 65	0
13	2R	118/118 (100%)	0.82	5 (4%) 36 39	45, 57, 67, 74	0
14	1S	110/112 (98%)	0.62	1 (0%) 84 86	45, 55, 66, 70	0
14	2S	110/112 (98%)	1.11	23 (20%) 1 0	72, 82, 86, 90	0
15	1T	131/146 (89%)	0.74	2 (1%) 73 75	40, 50, 72, 83	0
15	2T	131/146 (89%)	0.65	7 (5%) 26 28	52, 63, 79, 86	0
16	1U	116/118 (98%)	0.97	1 (0%) 84 86	28, 38, 50, 69	0
16	2U	116/118 (98%)	0.84	8 (6%) 16 17	47, 66, 78, 86	0
17	1V	101/101 (100%)	0.84	2 (1%) 65 68	29, 46, 62, 72	0
17	2V	101/101 (100%)	0.49	4 (3%) 38 41	49, 76, 82, 89	0
18	1W	112/113 (99%)	0.93	1 (0%) 84 86	31, 38, 58, 86	0
18	2W	112/113 (99%)	0.71	2 (1%) 68 71	46, 56, 74, 87	0
19	1X	95/96 (98%)	0.97	3 (3%) 47 51	32, 43, 64, 79	0
19	2X	95/96 (98%)	0.83	7 (7%) 14 15	55, 66, 79, 86	0
20	1Y	107/110 (97%)	0.72	2 (1%) 66 69	40, 54, 72, 82	0
20	2Y	107/110 (97%)	1.03	12 (11%) 5 4	65, 75, 83, 89	0
21	1Z	203/206 (98%)	0.59	6 (2%) 50 53	45, 62, 77, 87	0
21	2Z	201/206 (97%)	0.99	29 (14%) 2 2	73, 82, 88, 90	0
22	10	77/85 (90%)	0.86	2 (2%) 56 59	35, 43, 60, 68	0
22	20	77/85 (90%)	1.13	15 (19%) 1 1	59, 69, 78, 83	0
23	11	97/98 (98%)	0.91	5 (5%) 27 29	34, 49, 71, 84	0
23	21	97/98 (98%)	1.19	18 (18%) 1 1	47, 61, 79, 86	0
24	12	70/72 (97%)	0.73	1 (1%) 75 77	42, 55, 65, 84	0
24	22	70/72 (97%)	0.62	4 (5%) 23 25	67, 75, 82, 83	0
25	13	59/60 (98%)	0.86	0 100 100	30, 42, 63, 76	0
25	23	59/60 (98%)	0.85	7 (11%) 4 4	57, 67, 82, 93	0
26	14	69/71 (97%)	0.66	9 (13%) 3 3	61, 77, 92, 96	0
26	24	69/71 (97%)	2.51	35 (50%) 0 0	83, 93, 99, 100	0
27	15	59/60 (98%)	1.01	4 (6%) 17 17	28, 40, 58, 64	0
27	25	59/60 (98%)	0.60	2 (3%) 45 48	41, 56, 70, 75	0
28	16	53/54 (98%)	0.78	2 (3%) 40 43	39, 47, 61, 67	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
28	26	53/54 (98%)	0.57	0 100 100	60, 67, 74, 79	0
29	17	48/49 (97%)	1.28	9 (18%) 1 1	28, 35, 59, 71	0
29	27	48/49 (97%)	1.37	10 (20%) 1 0	39, 48, 70, 78	0
30	18	64/65 (98%)	0.91	1 (1%) 72 74	35, 40, 47, 59	0
30	28	64/65 (98%)	1.12	10 (15%) 2 1	54, 62, 68, 71	0
31	19	37/37 (100%)	0.77	0 100 100	37, 46, 61, 67	0
31	29	37/37 (100%)	1.36	8 (21%) 0 0	61, 72, 80, 82	0
32	1a	1488/1521 (97%)	0.31	36 (2%) 59 62	41, 73, 96, 110	0
32	2a	1492/1521 (98%)	0.45	70 (4%) 31 33	53, 81, 100, 110	0
33	1b	231/256 (90%)	0.83	29 (12%) 3 3	68, 82, 90, 94	0
33	2b	231/256 (90%)	1.14	50 (21%) 0 0	80, 88, 94, 97	0
34	1c	206/239 (86%)	0.71	18 (8%) 10 10	64, 76, 87, 91	0
34	2c	206/239 (86%)	1.29	48 (23%) 0 0	79, 88, 93, 95	0
35	1d	208/209 (99%)	1.15	39 (18%) 1 1	62, 76, 85, 88	0
35	2d	208/209 (99%)	0.84	22 (10%) 6 5	66, 76, 84, 87	0
36	1e	148/162 (91%)	0.71	7 (4%) 31 33	52, 70, 78, 91	0
36	2e	148/162 (91%)	0.97	22 (14%) 2 2	66, 78, 86, 93	0
37	1f	100/101 (99%)	0.34	0 100 100	59, 70, 78, 82	0
37	2f	100/101 (99%)	0.36	1 (1%) 82 84	63, 74, 83, 86	0
38	1g	155/156 (99%)	0.33	5 (3%) 47 51	68, 76, 83, 89	0
38	2g	155/156 (99%)	1.68	56 (36%) 0 0	81, 86, 91, 95	0
39	1h	137/138 (99%)	0.90	15 (10%) 5 5	63, 71, 78, 83	0
39	2h	137/138 (99%)	0.67	11 (8%) 12 12	69, 79, 84, 88	0
40	1i	127/128 (99%)	0.86	20 (15%) 2 1	65, 82, 89, 91	0
40	2i	126/128 (98%)	3.13	89 (70%) 0 0	81, 90, 95, 96	0
41	1j	97/105 (92%)	1.08	22 (22%) 0 0	64, 83, 91, 93	0
41	2j	96/105 (91%)	1.96	41 (42%) 0 0	83, 90, 94, 98	0
42	1k	114/129 (88%)	0.63	4 (3%) 44 47	48, 68, 78, 83	0
42	2k	114/129 (88%)	1.19	20 (17%) 1 1	66, 78, 85, 87	0
43	1l	121/132 (91%)	0.81	10 (8%) 11 11	53, 64, 75, 81	0
43	2l	121/132 (91%)	0.84	15 (12%) 4 3	64, 73, 78, 85	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
44	1m	116/126 (92%)	0.52	7 (6%) 21 22	64, 78, 83, 88	0
44	2m	114/126 (90%)	2.06	56 (49%) 0 0	84, 89, 93, 95	0
45	1n	60/61 (98%)	1.23	15 (25%) 0 0	68, 75, 81, 83	0
45	2n	60/61 (98%)	2.79	41 (68%) 0 0	83, 88, 93, 95	0
46	1o	88/89 (98%)	0.65	7 (7%) 12 12	51, 69, 79, 84	0
46	2o	88/89 (98%)	0.63	6 (6%) 17 17	64, 77, 83, 89	0
47	1p	82/88 (93%)	1.23	14 (17%) 1 1	69, 77, 85, 89	0
47	2p	82/88 (93%)	0.96	9 (10%) 5 5	66, 75, 83, 91	0
48	1q	99/105 (94%)	1.13	19 (19%) 1 1	59, 72, 82, 84	0
48	2q	99/105 (94%)	1.00	15 (15%) 2 1	63, 75, 82, 85	0
49	1r	68/88 (77%)	0.29	0 100 100	59, 68, 80, 85	0
49	2r	68/88 (77%)	0.92	7 (10%) 6 6	70, 77, 84, 89	0
50	1s	83/93 (89%)	0.50	3 (3%) 42 46	70, 80, 86, 93	0
50	2s	83/93 (89%)	2.67	51 (61%) 0 0	82, 91, 95, 98	0
51	1t	96/106 (90%)	1.18	21 (21%) 0 0	68, 76, 85, 86	0
51	2t	98/106 (92%)	0.76	9 (9%) 9 9	65, 75, 85, 88	0
52	1u	23/27 (85%)	1.34	8 (34%) 0 0	70, 74, 79, 79	0
52	2u	23/27 (85%)	3.68	19 (82%) 0 0	84, 89, 91, 93	0
53	1y	97/113 (85%)	0.91	12 (12%) 4 3	57, 67, 79, 82	0
53	2y	96/113 (84%)	2.99	65 (67%) 0 0	76, 84, 90, 93	0
All	All	20766/21468 (96%)	0.80	1779 (8%) 10 10	24, 69, 93, 111	0

All (1779) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
26	24	49	PHE	10.4
1	1A	1089	G	9.9
6	2G	29	TRP	9.7
40	2i	109	VAL	9.4
52	2u	14	TRP	9.2
53	2y	40	ILE	8.8
20	2Y	1	MET	8.6
32	1a	1030(B)	C	8.6
6	2G	39	ILE	8.5
1	1A	1075	C	8.3

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Mol	Chain	Res	Type	RSRZ
32	2a	1030(B)	C	8.3
6	2G	62	LEU	8.3
53	2y	88	LEU	8.2
1	1A	1066	U	8.2
40	2i	17	VAL	8.2
52	2u	13	ILE	8.0
1	2A	2602	A	8.0
45	2n	34	TYR	7.9
40	2i	36	TYR	7.8
1	1A	1090	U	7.7
1	1A	1087	G	7.7
21	2Z	191	VAL	7.7
26	24	45	GLY	7.7
1	2A	2139	C	7.6
44	2m	102	ARG	7.5
1	1A	1067	A	7.4
1	2A	2140	C	7.4
32	2a	1030(A)	G	7.3
32	1a	1031	G	7.3
40	2i	63	ILE	7.3
40	2i	18	PHE	7.2
21	2Z	125	LEU	7.2
1	2A	2146	C	7.2
1	2A	2147	G	7.2
40	2i	127	LYS	7.2
1	2A	2153	G	7.2
50	2s	10	PHE	7.1
6	2G	136	ARG	7.0
1	2A	1046	A	7.0
38	2g	6	ARG	7.0
1	2A	2169	A	7.0
23	11	2	SER	6.9
1	1A	1091	G	6.9
1	2A	2138	C	6.9
34	2c	8	ILE	6.8
23	21	2	SER	6.8
1	2A	2116	G	6.7
35	1d	2	GLY	6.7
53	2y	9	GLN	6.7
1	1A	1076	C	6.7
52	2u	6	ARG	6.7
44	2m	4	ILE	6.6

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Mol	Chain	Res	Type	RSRZ
1	2A	2174	C	6.6
1	2A	2107	C	6.6
1	2A	2168	G	6.5
38	2g	27	ILE	6.5
53	2y	38	HIS	6.5
32	1a	1001	A	6.5
52	2u	2	GLY	6.4
1	2A	2142	C	6.4
21	2Z	192	ALA	6.4
53	2y	63	ALA	6.4
45	2n	2	ALA	6.4
42	2k	13	GLN	6.4
40	2i	7	THR	6.3
44	2m	6	GLY	6.3
50	2s	49	ILE	6.3
41	2j	47	PHE	6.3
6	2G	5	VAL	6.3
14	2S	32	LEU	6.2
34	2c	160	ALA	6.2
44	2m	116	THR	6.2
1	2A	2110	G	6.2
50	2s	69	HIS	6.2
1	1A	1102	C	6.2
6	2G	157	ILE	6.2
32	1a	1036	G	6.2
40	2i	10	ARG	6.2
40	2i	67	GLY	6.2
50	2s	15	LEU	6.2
40	2i	114	TYR	6.1
1	2A	1509	C	6.1
45	2n	29	ARG	6.1
34	2c	124	ILE	6.1
1	2A	2106	G	6.1
40	2i	88	TYR	6.1
53	2y	48	PHE	6.1
1	2A	2173	A	6.0
6	2G	3	LEU	6.0
1	1A	1065	U	6.0
50	2s	62	ILE	5.9
53	2y	77	LEU	5.9
50	2s	39	THR	5.9
1	2A	2125	G	5.9

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Mol	Chain	Res	Type	RSRZ
6	2G	43	LEU	5.9
6	2G	73	ALA	5.8
53	2y	47	GLY	5.8
53	2y	8	LYS	5.8
6	2G	152	LEU	5.8
6	2G	37	VAL	5.7
1	2A	2118	U	5.7
1	1A	1064	C	5.7
38	2g	155	ARG	5.7
48	2q	98	LEU	5.7
53	2y	92	GLY	5.7
38	2g	154	TYR	5.7
1	2A	2132	U	5.7
1	2A	2148	G	5.7
45	2n	10	ALA	5.7
38	2g	156	TRP	5.6
1	1A	1074	G	5.6
26	24	40	HIS	5.6
32	2a	1030	C	5.6
44	2m	66	LEU	5.6
40	2i	75	ASP	5.6
53	2y	78	ILE	5.6
40	2i	108	VAL	5.5
1	2A	2119	A	5.5
6	2G	19	LEU	5.5
1	2A	2124	G	5.5
6	2G	120	LEU	5.5
34	2c	157	ILE	5.5
50	2s	16	LEU	5.5
1	1A	2141	G	5.5
32	1a	1492	A	5.4
1	2A	2179	C	5.4
6	2G	140	ILE	5.4
34	2c	65	ALA	5.4
40	2i	90	PRO	5.4
6	2G	15	VAL	5.4
1	1A	1072	C	5.4
6	2G	160	VAL	5.4
1	2A	2151	G	5.4
32	1a	1030(D)	A	5.4
38	2g	41	ARG	5.4
33	2b	136	VAL	5.4

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Mol	Chain	Res	Type	RSRZ
8	2I	35	LEU	5.4
1	2A	2152	G	5.3
1	1A	1080	C	5.3
1	2A	888	C	5.3
26	24	68	ARG	5.3
26	24	19	GLY	5.3
48	1q	98	LEU	5.3
38	2g	32	ARG	5.3
50	2s	45	VAL	5.3
50	2s	82	GLY	5.3
53	2y	39	ILE	5.3
32	2a	1034	G	5.3
33	2b	44	LEU	5.3
1	2A	2141	G	5.3
45	2n	31	ARG	5.3
26	24	50	VAL	5.2
53	2y	87	LYS	5.2
26	24	7	PRO	5.2
53	2y	58	ASN	5.2
40	2i	102	LEU	5.2
6	2G	155	MET	5.2
1	2A	2155	G	5.2
35	1d	157	LEU	5.2
1	2A	2154	G	5.2
50	2s	79	THR	5.1
1	1A	1081	U	5.1
1	2A	2167	U	5.1
6	2G	28	VAL	5.1
1	1A	1078	U	5.1
6	2G	94	LEU	5.1
51	1t	76	ALA	5.1
1	2A	2165	G	5.1
1	2A	229	A	5.1
26	24	29	PRO	5.1
41	2j	62	HIS	5.1
26	24	32	TYR	5.0
1	2A	1067	A	5.0
35	1d	180	GLY	5.0
26	24	30	GLU	5.0
32	1a	1030(C)	G	5.0
6	2G	25	TYR	5.0
50	2s	3	ARG	5.0

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Mol	Chain	Res	Type	RSRZ
38	2g	9	VAL	5.0
32	2a	1036	G	5.0
6	2G	135	LEU	5.0
41	2j	40	LEU	5.0
6	2G	146	TYR	5.0
32	2a	1286	A	5.0
1	2A	2162	G	4.9
32	1a	1257	U	4.9
35	1d	70	ILE	4.9
53	1y	95	ARG	4.9
26	14	56	VAL	4.9
6	2G	87	PRO	4.9
29	27	48	LYS	4.9
6	2G	102	PHE	4.9
26	24	52	THR	4.9
53	2y	4	ASN	4.9
38	2g	78	ARG	4.9
38	1g	156	TRP	4.9
42	1k	25	TYR	4.9
6	2G	161	THR	4.9
53	2y	5	ILE	4.9
53	2y	71	TYR	4.8
31	29	16	VAL	4.8
6	2G	58	GLN	4.8
32	2a	1001	A	4.8
38	2g	25	ALA	4.8
34	2c	87	LEU	4.8
26	24	66	SER	4.8
32	2a	1028	C	4.8
33	2b	97	TRP	4.8
40	2i	62	TYR	4.8
50	2s	52	TYR	4.8
14	2S	54	LEU	4.8
34	1c	2	GLY	4.8
40	2i	103	THR	4.8
53	2y	52	ALA	4.8
1	2A	2109	U	4.7
40	2i	66	ARG	4.7
44	2m	15	VAL	4.7
26	24	44	THR	4.7
6	2G	23	PHE	4.7
33	2b	127	ILE	4.7

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Mol	Chain	Res	Type	RSRZ
33	2b	214	ILE	4.7
6	2G	34	LEU	4.7
45	2n	44	LEU	4.7
22	20	11	ARG	4.7
1	1A	1088	A	4.7
36	2e	12	LEU	4.7
1	2A	1076	C	4.7
40	2i	26	VAL	4.7
33	1b	228	GLY	4.7
41	2j	38	ILE	4.7
45	2n	35	ARG	4.7
1	1A	1103	A	4.7
34	2c	33	LEU	4.7
32	2a	1257	U	4.7
44	2m	64	TRP	4.7
34	2c	190	ARG	4.7
1	1A	1068	G	4.7
6	2G	131	TYR	4.7
40	2i	5	TYR	4.7
1	2A	2136	C	4.7
39	1h	93	VAL	4.7
41	2j	34	VAL	4.7
50	2s	9	VAL	4.7
33	2b	123	ALA	4.7
40	2i	33	PHE	4.7
34	2c	196	LEU	4.7
1	1A	2132	U	4.6
32	2a	1026	G	4.6
6	2G	139	LEU	4.6
39	2h	2	LEU	4.6
40	2i	85	LEU	4.6
32	1a	1001(A)	G	4.6
41	2j	65	LEU	4.6
38	2g	42	ILE	4.6
3	2D	38	LYS	4.6
32	1a	1028	C	4.6
40	2i	21	PRO	4.6
38	2g	34	GLY	4.6
7	2H	6	ARG	4.6
52	2u	16	GLY	4.6
44	2m	84	ILE	4.6
32	1a	1034	G	4.6

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Mol	Chain	Res	Type	RSRZ
40	2i	92	TYR	4.6
21	2Z	155	LEU	4.6
32	1a	1033	G	4.5
1	2A	2176	A	4.5
29	27	47	ARG	4.5
1	1A	1079	C	4.5
33	2b	133	LYS	4.5
40	2i	74	ILE	4.5
44	2m	42	ALA	4.5
53	2y	15	ALA	4.5
52	2u	15	ARG	4.5
22	20	45	PHE	4.5
1	2A	2120	G	4.5
6	2G	133	LEU	4.5
1	2A	2111	C	4.5
40	2i	59	PHE	4.5
14	2S	35	ILE	4.5
20	2Y	55	TYR	4.5
41	2j	68	HIS	4.5
40	2i	106	ALA	4.5
6	2G	92	VAL	4.5
6	1G	146	TYR	4.4
53	2y	42	SER	4.4
41	2j	72	VAL	4.4
32	2a	1492	A	4.4
52	2u	23	PRO	4.4
1	2A	2108	C	4.4
6	2G	101	ILE	4.4
1	2A	2131	G	4.4
1	2A	2133	G	4.4
40	2i	122	ALA	4.4
26	24	27	THR	4.4
40	2i	72	GLY	4.4
44	2m	7	VAL	4.4
40	2i	110	GLU	4.4
44	2m	75	ALA	4.4
41	2j	54	PHE	4.4
32	2a	1027	C	4.4
40	2i	126	SER	4.4
36	1e	21	ALA	4.3
40	2i	115	GLY	4.3
32	1a	1029	C	4.3

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Mol	Chain	Res	Type	RSRZ
6	2G	41	GLN	4.3
50	2s	11	VAL	4.3
6	2G	63	ILE	4.3
40	2i	42	ARG	4.3
1	1A	888	C	4.3
45	2n	61	TRP	4.3
33	2b	132	LYS	4.3
40	2i	86	VAL	4.3
1	2A	2145	C	4.3
53	2y	12	ILE	4.3
33	2b	232	PRO	4.3
32	2a	1202	G	4.3
47	1p	17	TYR	4.3
52	2u	9	ARG	4.3
6	2G	32	PRO	4.3
45	2n	12	ARG	4.3
50	2s	30	LEU	4.3
29	27	46	VAL	4.3
53	2y	10	MET	4.3
41	2j	67	THR	4.3
1	1A	2142	C	4.3
53	2y	64	SER	4.3
38	2g	120	ILE	4.2
41	2j	46	ARG	4.2
40	2i	61	ALA	4.2
53	2y	73	ALA	4.2
1	1A	1086	A	4.2
32	2a	1001(A)	G	4.2
35	1d	23	GLY	4.2
1	1A	2140	C	4.2
35	1d	3	ARG	4.2
6	2G	86	MET	4.2
44	2m	5	ALA	4.2
41	2j	96	ILE	4.2
32	2a	1030(C)	G	4.2
40	2i	119	ALA	4.2
50	2s	53	ASN	4.2
1	2A	2144	U	4.2
50	2s	71	LEU	4.2
6	2G	35	GLU	4.2
7	1H	2	SER	4.2
11	2P	79	ARG	4.2

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Mol	Chain	Res	Type	RSRZ
48	1q	27	PHE	4.2
1	2A	1083	U	4.2
38	2g	118	VAL	4.2
40	2i	69	GLY	4.2
45	2n	55	GLY	4.2
1	2A	887	A	4.2
1	2A	2126	A	4.2
1	2A	2134	A	4.2
40	2i	120	ARG	4.1
40	2i	121	ARG	4.1
6	2G	2	PRO	4.1
6	2G	137	GLU	4.1
21	2Z	7	ALA	4.1
51	1t	66	ALA	4.1
1	1A	1092	C	4.1
26	24	46	GLN	4.1
39	1h	133	LEU	4.1
6	2G	108	ASN	4.1
26	14	50	VAL	4.1
34	1c	193	TYR	4.1
1	2A	2172	U	4.1
42	2k	98	LEU	4.1
1	1A	2147	G	4.1
50	2s	66	MET	4.1
41	2j	45	ARG	4.1
1	1A	2107	C	4.1
32	1a	1030	C	4.1
41	2j	27	ALA	4.1
1	1A	2116	G	4.1
44	1m	115	LYS	4.1
45	2n	38	GLY	4.1
50	2s	68	GLY	4.1
26	24	63	TYR	4.1
43	1l	64	TYR	4.1
1	2A	2170	A	4.1
45	2n	51	GLY	4.1
32	2a	1033	G	4.1
42	2k	75	TYR	4.1
14	2S	31	SER	4.1
1	2A	1095	A	4.1
40	2i	76	ALA	4.1
42	2k	29	ILE	4.0

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Mol	Chain	Res	Type	RSRZ
33	2b	92	TYR	4.0
1	2A	1075	C	4.0
14	2S	20	ARG	4.0
21	2Z	199	LYS	4.0
38	2g	36	LYS	4.0
51	1t	55	ILE	4.0
50	2s	80	TYR	4.0
7	2H	102	ALA	4.0
1	1A	2602	A	4.0
7	2H	103	LEU	4.0
39	1h	134	ILE	4.0
43	2l	64	TYR	4.0
38	2g	83	ALA	4.0
1	1A	1093	G	4.0
33	2b	165	VAL	4.0
44	2m	110	ARG	4.0
50	2s	70	LYS	4.0
51	1t	72	LEU	4.0
34	2c	155	GLY	4.0
34	2c	158	GLY	4.0
6	2G	6	ALA	4.0
45	2n	49	HIS	4.0
32	2a	80	G	4.0
50	2s	5	LEU	4.0
36	2e	21	ALA	4.0
40	1i	125	TYR	4.0
44	2m	87	TYR	4.0
35	1d	179	GLU	4.0
40	2i	53	VAL	4.0
50	2s	41	VAL	4.0
12	2Q	104	PHE	3.9
33	1b	214	ILE	3.9
53	2y	84	GLN	3.9
33	2b	227	GLY	3.9
1	2A	2161	C	3.9
1	2A	2160	G	3.9
34	2c	159	GLY	3.9
44	2m	23	TYR	3.9
51	2t	10	LEU	3.9
6	2G	75	LYS	3.9
40	2i	113	LYS	3.9
31	29	37	GLY	3.9

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Mol	Chain	Res	Type	RSRZ
6	2G	126	ASP	3.9
6	2G	38	VAL	3.9
36	2e	13	ILE	3.9
43	1l	61	THR	3.9
50	2s	77	THR	3.9
41	2j	6	ILE	3.9
7	2H	24	VAL	3.9
44	2m	95	GLY	3.8
26	24	1	MET	3.8
45	2n	22	THR	3.8
1	2A	2166	G	3.8
50	2s	81	ARG	3.8
52	2u	10	ARG	3.8
34	2c	195	VAL	3.8
48	1q	37	LYS	3.8
1	2A	1085	A	3.8
53	2y	3	MET	3.8
53	2y	50	ALA	3.8
1	2A	2159	G	3.8
40	2i	14	VAL	3.8
12	2Q	59	ARG	3.8
52	2u	22	ARG	3.8
53	2y	94	ALA	3.8
53	2y	51	ASP	3.8
14	2S	29	PHE	3.8
47	1p	38	TYR	3.8
32	1a	1000	U	3.8
7	2H	35	VAL	3.8
40	2i	44	VAL	3.8
6	2G	125	PHE	3.8
40	2i	123	PRO	3.8
50	2s	28	LYS	3.8
7	2H	19	VAL	3.8
40	1i	19	LEU	3.8
6	2G	138	GLN	3.8
41	2j	48	THR	3.8
41	2j	63	PHE	3.8
53	2y	35	ILE	3.8
21	2Z	198	LYS	3.8
1	1A	1077	A	3.8
1	2A	2171	A	3.8
6	2G	7	LEU	3.8

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Mol	Chain	Res	Type	RSRZ
47	2p	19	ILE	3.7
8	2I	3	VAL	3.7
26	24	56	VAL	3.7
6	2G	80	PHE	3.7
6	2G	110	ALA	3.7
33	2b	70	PHE	3.7
33	2b	228	GLY	3.7
42	2k	104	GLN	3.7
32	1a	1037	C	3.7
6	2G	82	LEU	3.7
9	2N	140	VAL	3.7
1	2A	886	C	3.7
41	2j	44	VAL	3.7
21	1Z	192	ALA	3.7
42	2k	87	THR	3.7
1	1A	2139	C	3.7
53	2y	17	ARG	3.7
6	2G	52	ILE	3.7
6	2G	88	ILE	3.7
47	1p	48	TRP	3.7
52	2u	11	GLY	3.7
6	2G	142	PRO	3.7
33	1b	118	LEU	3.7
34	2c	153	VAL	3.7
45	1n	33	VAL	3.7
43	2l	32	PHE	3.6
33	2b	231	GLU	3.6
33	2b	37	ASN	3.6
40	2i	6	GLY	3.6
7	2H	36	PRO	3.6
35	1d	4	TYR	3.6
32	2a	1031	G	3.6
43	2l	18	VAL	3.6
6	2G	109	VAL	3.6
15	2T	66	VAL	3.6
32	1a	1030(A)	G	3.6
6	2G	85	GLY	3.6
1	2A	2130	U	3.6
34	2c	164	ARG	3.6
38	2g	80	VAL	3.6
41	2j	66	ARG	3.6
34	2c	152	ILE	3.6

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Mol	Chain	Res	Type	RSRZ
35	2d	5	ILE	3.6
6	2G	68	PRO	3.6
3	2D	155	LEU	3.6
35	2d	11	LEU	3.6
48	1q	7	THR	3.6
1	1A	1085	A	3.6
1	1A	2117	A	3.6
3	2D	235	GLY	3.6
34	2c	2	GLY	3.6
6	2G	144	ILE	3.6
7	2H	4	ILE	3.6
45	2n	42	ILE	3.6
6	2G	176	LEU	3.6
48	2q	100	LYS	3.6
52	1u	14	TRP	3.6
35	1d	138	TYR	3.6
38	2g	117	ALA	3.6
38	2g	86	GLN	3.6
45	2n	50	LYS	3.6
35	2d	70	ILE	3.5
53	2y	75	ASN	3.5
53	2y	98	ALA	3.5
40	1i	114	TYR	3.5
33	1b	140	HIS	3.5
48	2q	65	ILE	3.5
6	2G	49	ASP	3.5
35	1d	167	GLY	3.5
40	2i	46	ALA	3.5
1	2A	2137	C	3.5
1	2A	2143	C	3.5
33	2b	101	MET	3.5
33	2b	124	SER	3.5
32	1a	1026	G	3.5
44	1m	4	ILE	3.5
47	1p	19	ILE	3.5
32	1a	1035	A	3.5
1	2A	889	C	3.5
6	2G	149	VAL	3.5
34	2c	207	VAL	3.5
42	2k	14	VAL	3.5
41	2j	41	PRO	3.5
1	1A	2144	U	3.5

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Mol	Chain	Res	Type	RSRZ
7	2H	82	GLY	3.5
50	2s	29	ARG	3.5
32	2a	1373	G	3.5
53	2y	11	GLU	3.5
26	14	52	THR	3.5
34	2c	194	GLY	3.5
41	1j	54	PHE	3.5
1	2A	2190	G	3.5
42	2k	31	THR	3.5
33	2b	48	MET	3.5
32	2a	1030(D)	A	3.5
48	1q	28	PRO	3.5
36	2e	29	GLY	3.5
21	2Z	197	ILE	3.5
42	2k	108	ILE	3.5
33	1b	121	LEU	3.5
41	2j	71	LEU	3.5
53	2y	95	ARG	3.5
1	2A	2150	U	3.4
3	2D	37	LEU	3.4
19	2X	68	ARG	3.4
47	1p	73	LEU	3.4
34	2c	167	TRP	3.4
50	2s	34	TRP	3.4
1	2A	652(B)	A	3.4
34	2c	23	TYR	3.4
45	2n	45	ARG	3.4
1	2A	2105	C	3.4
1	2A	2164	C	3.4
6	2G	97	ASP	3.4
53	2y	70	MET	3.4
1	2A	2191	G	3.4
9	2N	85	ILE	3.4
32	2a	1224	G	3.4
36	2e	133	TYR	3.4
41	2j	23	ILE	3.4
45	2n	37	PHE	3.4
51	1t	74	LYS	3.4
1	1A	1083	U	3.4
53	2y	41	LEU	3.4
40	2i	93	ARG	3.4
48	1q	99	SER	3.4

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Mol	Chain	Res	Type	RSRZ
33	2b	139	LYS	3.4
34	2c	199	LYS	3.4
6	1G	48	GLU	3.4
4	2E	124	GLY	3.4
12	2Q	5	ARG	3.4
1	1A	1104	C	3.4
26	24	6	HIS	3.4
4	2E	134	ILE	3.4
21	2Z	76	LEU	3.4
50	2s	31	ILE	3.4
21	1Z	51	ALA	3.4
29	27	1	MET	3.4
1	2A	890	A	3.4
32	2a	1531	A	3.4
1	1A	1063	G	3.4
1	2A	2175	C	3.4
6	2G	182	LYS	3.4
53	2y	91	LYS	3.4
22	20	76	GLY	3.3
33	2b	223	ILE	3.3
41	2j	85	LEU	3.3
53	1y	35	ILE	3.3
45	1n	61	TRP	3.3
26	24	39	CYS	3.3
26	24	8	LYS	3.3
45	2n	41	ARG	3.3
20	2Y	42	VAL	3.3
25	23	60	GLU	3.3
6	2G	61	ALA	3.3
40	2i	105	ASP	3.3
14	2S	92	TYR	3.3
38	2g	85	TYR	3.3
51	1t	18	GLN	3.3
21	2Z	141	VAL	3.3
33	2b	118	LEU	3.3
1	1A	2153	G	3.3
38	2g	76	ARG	3.3
26	24	57	GLU	3.3
40	2i	125	TYR	3.3
26	24	64	GLY	3.3
12	2Q	29	PHE	3.3
35	2d	67	ILE	3.3

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Mol	Chain	Res	Type	RSRZ
53	2y	45	PRO	3.3
47	2p	7	ALA	3.3
14	2S	33	LYS	3.3
41	1j	57	LYS	3.3
53	2y	49	VAL	3.3
7	2H	7	LEU	3.3
47	1p	49	LEU	3.3
32	2a	1092	A	3.3
51	1t	68	LYS	3.3
1	2A	2157	G	3.3
6	2G	95	ARG	3.3
29	17	47	ARG	3.3
45	2n	26	ARG	3.3
17	2V	47	VAL	3.3
33	2b	233	SER	3.3
39	1h	2	LEU	3.3
33	2b	201	ILE	3.3
44	2m	43	THR	3.3
50	2s	75	ALA	3.3
32	1a	162	A	3.3
32	2a	1357	A	3.3
34	2c	206	GLU	3.3
41	2j	70	ARG	3.3
43	2l	19	ARG	3.3
49	2r	87	ARG	3.3
40	2i	4	TYR	3.3
42	2k	25	TYR	3.3
44	2m	111	LYS	3.3
34	2c	162	GLN	3.3
40	1i	109	VAL	3.3
1	1A	1071	G	3.2
38	2g	22	LEU	3.2
40	2i	20	ARG	3.2
1	2A	2129	C	3.2
1	2A	2135	A	3.2
7	2H	49	VAL	3.2
6	2G	65	GLY	3.2
48	1q	38	ARG	3.2
51	1t	22	ARG	3.2
1	2A	2123	G	3.2
1	2A	2149	G	3.2
33	2b	122	PHE	3.2

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Mol	Chain	Res	Type	RSRZ
40	2i	11	LYS	3.2
26	24	43	TYR	3.2
18	2W	60	ASN	3.2
40	1i	106	ALA	3.2
38	2g	26	PHE	3.2
1	1A	2115	G	3.2
6	2G	51	ARG	3.2
35	2d	8	VAL	3.2
45	1n	6	LEU	3.2
34	2c	3	ASN	3.2
8	2I	92	VAL	3.2
23	2I	62	VAL	3.2
8	2I	12	LEU	3.2
38	2g	40	ALA	3.2
1	1A	2113	U	3.2
5	2F	89	VAL	3.2
39	1h	112	LEU	3.2
40	2i	111	ARG	3.2
40	1i	33	PHE	3.2
45	2n	16	PHE	3.2
40	2i	8	GLY	3.2
20	2Y	51	VAL	3.2
44	2m	60	VAL	3.2
44	2m	107	ALA	3.1
23	2I	7	ILE	3.1
26	14	49	PHE	3.1
7	2H	115	VAL	3.1
33	2b	164	VAL	3.1
34	2c	76	VAL	3.1
33	1b	188	ALA	3.1
53	2y	53	THR	3.1
29	17	1	MET	3.1
40	2i	104	ARG	3.1
42	2k	42	TRP	3.1
14	2S	5	THR	3.1
26	24	33	VAL	3.1
29	17	48	LYS	3.1
34	2c	177	THR	3.1
36	2e	16	THR	3.1
40	2i	112	LYS	3.1
47	1p	7	ALA	3.1
48	1q	9	VAL	3.1

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Mol	Chain	Res	Type	RSRZ
47	1p	39	TYR	3.1
15	1T	38	ASN	3.1
33	2b	18	GLY	3.1
35	1d	67	ILE	3.1
38	2g	10	ARG	3.1
41	1j	38	ILE	3.1
48	2q	90	ILE	3.1
32	2a	1029	C	3.1
1	1A	1095	A	3.1
21	2Z	96	VAL	3.1
38	2g	12	LEU	3.1
45	2n	53	LEU	3.1
52	2u	8	THR	3.1
34	2c	197	GLY	3.1
40	2i	117	HIS	3.1
45	1n	34	TYR	3.1
32	2a	1235	U	3.1
44	2m	13	LYS	3.1
2	2B	118	G	3.1
7	2H	98	LEU	3.1
45	2n	39	LEU	3.1
50	2s	36	ARG	3.1
26	24	10	VAL	3.1
40	2i	65	VAL	3.1
45	1n	18	VAL	3.1
53	2y	67	HIS	3.1
21	2Z	171	ILE	3.1
44	2m	69	GLU	3.1
23	2l	79	GLY	3.1
34	1c	47	LEU	3.1
8	2l	21	VAL	3.1
45	1n	15	LYS	3.1
48	1q	97	SER	3.1
1	1A	2152	G	3.1
1	1A	1082	U	3.1
12	2Q	65	PHE	3.1
33	2b	135	GLN	3.1
41	2j	98	ILE	3.1
32	1a	1027	C	3.1
3	2D	182	LEU	3.1
34	2c	163	ALA	3.1
45	2n	6	LEU	3.1

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Mol	Chain	Res	Type	RSRZ
53	1y	94	ALA	3.1
43	2l	96	VAL	3.1
32	2a	841	U	3.0
33	2b	41	ILE	3.0
3	1D	275	LYS	3.0
1	2A	1104	C	3.0
39	2h	112	LEU	3.0
40	2i	45	ALA	3.0
44	2m	51	ALA	3.0
33	2b	93	VAL	3.0
21	2Z	4	ARG	3.0
23	2l	61	ARG	3.0
32	2a	1255	G	3.0
53	2y	62	VAL	3.0
40	2i	22	GLY	3.0
33	1b	97	TRP	3.0
53	2y	46	GLN	3.0
7	2H	101	ARG	3.0
26	24	9	LEU	3.0
40	2i	56	LEU	3.0
39	2h	93	VAL	3.0
1	2A	2180	U	3.0
39	2h	86	ILE	3.0
14	2S	3	ARG	3.0
32	2a	1363(A)	A	3.0
44	2m	93	ARG	3.0
19	2X	92	LEU	3.0
1	2A	2127	G	3.0
7	2H	37	VAL	3.0
45	2n	25	VAL	3.0
1	2A	271(K)	U	3.0
34	2c	85	ARG	3.0
2	2B	58	A	3.0
14	2S	51	ALA	3.0
21	2Z	187	ALA	3.0
40	2i	19	LEU	3.0
34	1c	80	GLY	3.0
44	2m	89	GLY	3.0
51	2t	11	SER	3.0
3	2D	276	LYS	3.0
7	2H	25	LYS	3.0
1	2A	6	A	3.0

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Mol	Chain	Res	Type	RSRZ
1	2A	2117	A	3.0
9	2N	26	LEU	3.0
20	1Y	23	ARG	3.0
22	20	8	GLY	3.0
40	1i	128	ARG	3.0
48	2q	9	VAL	2.9
7	2H	123	PHE	2.9
1	1A	1509	C	2.9
41	2j	19	SER	2.9
3	2D	2	ALA	2.9
15	2T	111	ARG	2.9
23	2I	71	TYR	2.9
31	29	19	ARG	2.9
40	2i	9	ARG	2.9
40	2i	79	LEU	2.9
52	2u	24	ARG	2.9
47	2p	48	TRP	2.9
33	1b	133	LYS	2.9
38	2g	153	HIS	2.9
1	2A	1066	U	2.9
6	2G	77	ILE	2.9
35	2d	146	ILE	2.9
1	2A	2112	G	2.9
51	1t	9	ASN	2.9
32	1a	1447	A	2.9
32	2a	1287	A	2.9
42	2k	30	VAL	2.9
50	2s	60	VAL	2.9
48	1q	36	ILE	2.9
34	1c	81	GLY	2.9
7	2H	88	LEU	2.9
12	2Q	114	ALA	2.9
32	2a	1149	C	2.9
1	2A	2104	G	2.9
29	17	46	VAL	2.9
21	2Z	193	GLU	2.9
36	2e	84	PHE	2.9
47	1p	59	TRP	2.9
26	24	54	GLY	2.9
20	2Y	50	ARG	2.9
50	2s	61	TYR	2.9
40	2i	124	GLN	2.9

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Mol	Chain	Res	Type	RSRZ
1	1A	2151	G	2.9
1	1A	2156	G	2.9
39	1h	56	LYS	2.9
40	1i	116	LYS	2.9
32	1a	841	U	2.9
34	2c	39	ILE	2.9
8	2I	38	LEU	2.9
43	2l	51	ALA	2.9
50	2s	50	ALA	2.9
51	1t	79	ARG	2.9
29	27	32	LYS	2.9
32	2a	1322	C	2.9
36	2e	105	VAL	2.9
41	1j	24	VAL	2.9
42	2k	109	VAL	2.9
44	2m	26	GLY	2.9
1	1A	1176	G	2.9
6	2G	59	GLU	2.9
38	2g	62	PHE	2.9
40	2i	81	ILE	2.9
2	2B	53	A	2.9
8	2I	61	ARG	2.9
6	2G	151	ALA	2.9
6	2G	67	LYS	2.9
12	2Q	34	LEU	2.9
44	2m	65	LYS	2.9
48	2q	22	LEU	2.9
35	1d	152	SER	2.8
36	2e	10	MET	2.8
33	2b	96	ARG	2.8
32	1a	1025	U	2.8
35	1d	110	PHE	2.8
1	2A	2181	G	2.8
24	22	60	LEU	2.8
41	1j	68	HIS	2.8
36	2e	14	ARG	2.8
42	2k	126	ARG	2.8
48	2q	91	ARG	2.8
50	1s	4	SER	2.8
8	2I	19	VAL	2.8
1	1A	2143	C	2.8
1	2A	614(A)	U	2.8

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Mol	Chain	Res	Type	RSRZ
36	2e	86	ALA	2.8
35	1d	120	LEU	2.8
6	2G	134	GLY	2.8
46	2o	86	GLY	2.8
12	2Q	35	VAL	2.8
21	2Z	100	VAL	2.8
33	1b	165	VAL	2.8
6	2G	17	PRO	2.8
3	2D	92	ILE	2.8
50	2s	27	GLU	2.8
6	2G	57	ALA	2.8
48	1q	100	LYS	2.8
12	2Q	33	GLY	2.8
53	2y	79	ASN	2.8
32	1a	1286	A	2.8
20	1Y	1	MET	2.8
6	2G	104	GLU	2.8
23	21	49	VAL	2.8
25	23	15	TYR	2.8
45	2n	54	PRO	2.8
1	2A	1064	C	2.8
41	2j	29	ARG	2.8
47	2p	11	SER	2.8
30	28	49	VAL	2.8
33	1b	232	PRO	2.8
1	2A	2156	G	2.8
32	2a	1353	G	2.8
38	2g	4	ARG	2.8
44	2m	94	ARG	2.8
44	2m	76	ALA	2.8
14	2S	58	LEU	2.8
22	20	55	ARG	2.8
26	24	18	CYS	2.8
48	1q	10	VAL	2.8
50	2s	2	PRO	2.8
26	24	67	TYR	2.8
1	1A	2167	U	2.8
26	14	59	PHE	2.8
1	1A	2159	G	2.8
20	2Y	106	LEU	2.8
1	1A	1053	C	2.8
1	2A	1103	A	2.7

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Mol	Chain	Res	Type	RSRZ
39	1h	58	TYR	2.7
7	2H	9	ILE	2.7
7	2H	106	THR	2.7
10	2O	69	ILE	2.7
53	2y	6	THR	2.7
35	1d	135	LEU	2.7
1	2A	2183	C	2.7
41	2j	89	ASP	2.7
6	2G	112	PRO	2.7
41	2j	33	GLN	2.7
51	1t	73	HIS	2.7
14	2S	14	VAL	2.7
35	1d	105	VAL	2.7
7	2H	72	ILE	2.7
12	2Q	121	ALA	2.7
33	2b	120	ALA	2.7
35	1d	21	LEU	2.7
40	2i	54	ASP	2.7
1	1A	2155	G	2.7
1	2A	2163	C	2.7
33	1b	229	VAL	2.7
47	2p	62	VAL	2.7
14	2S	40	ILE	2.7
33	1b	28	PHE	2.7
33	2b	210	SER	2.7
34	1c	91	LEU	2.7
40	2i	71	SER	2.7
26	14	46	GLN	2.7
32	2a	1248	A	2.7
6	2G	72	ARG	2.7
19	2X	60	ARG	2.7
27	25	6	VAL	2.7
38	2g	8	GLU	2.7
32	2a	1032	G	2.7
38	2g	152	ALA	2.7
43	2l	13	LYS	2.7
7	2H	121	ILE	2.7
53	2y	7	SER	2.7
34	1c	201	TYR	2.7
43	1l	28	LYS	2.7
1	1A	2161	C	2.7
1	2A	34	C	2.7

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Mol	Chain	Res	Type	RSRZ
21	2Z	58	VAL	2.7
22	20	51	VAL	2.7
32	2a	1141	C	2.7
18	2W	96	ILE	2.7
11	2P	110	TYR	2.7
44	2m	59	TYR	2.7
33	1b	130	ARG	2.7
42	2k	18	ARG	2.7
44	1m	102	ARG	2.7
32	2a	1157	A	2.7
40	2i	73	GLN	2.7
4	2E	167	VAL	2.7
1	1A	2145	C	2.7
23	21	83	GLU	2.7
44	1m	2	ALA	2.7
23	21	98	LEU	2.7
32	2a	1150	U	2.7
35	2d	64	LEU	2.7
43	1l	60	LEU	2.7
44	2m	25	ILE	2.7
49	2r	85	LEU	2.7
38	2g	28	ASN	2.7
1	1A	1073	A	2.6
10	2O	57	VAL	2.6
38	2g	134	ALA	2.6
45	2n	48	ALA	2.6
50	2s	35	SER	2.6
1	2A	2113	U	2.6
2	2B	55	U	2.6
22	20	46	LYS	2.6
45	2n	15	LYS	2.6
53	2y	80	LYS	2.6
7	2H	148	ILE	2.6
14	2S	12	PHE	2.6
16	2U	80	ILE	2.6
21	2Z	5	LEU	2.6
35	1d	11	LEU	2.6
40	2i	40	LEU	2.6
33	2b	131	PRO	2.6
1	2A	2187	G	2.6
4	2E	150	VAL	2.6
45	2n	33	VAL	2.6

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Mol	Chain	Res	Type	RSRZ
50	2s	67	VAL	2.6
51	2t	44	ALA	2.6
34	2c	81	GLY	2.6
40	2i	57	GLY	2.6
42	2k	117	ASN	2.6
44	2m	62	ASN	2.6
51	1t	69	GLY	2.6
20	2Y	60	PHE	2.6
8	2I	46	ALA	2.6
35	1d	147	ALA	2.6
1	1A	1084	A	2.6
6	2G	173	LEU	2.6
32	2a	1035	A	2.6
34	2c	188	LEU	2.6
35	2d	158	ILE	2.6
41	1j	46	ARG	2.6
45	1n	4	LYS	2.6
32	2a	1223	C	2.6
19	1X	69	TYR	2.6
34	2c	154	SER	2.6
41	1j	20	ALA	2.6
46	2o	89	GLY	2.6
47	1p	44	THR	2.6
1	2A	2115	G	2.6
6	2G	90	LEU	2.6
32	1a	1003	G	2.6
38	2g	99	LEU	2.6
39	2h	36	LEU	2.6
40	1i	105	ASP	2.6
41	2j	17	ASP	2.6
44	2m	48	LEU	2.6
44	2m	71	ARG	2.6
45	2n	21	TYR	2.6
48	2q	93	GLN	2.6
9	2N	81	GLY	2.6
21	2Z	200	GLY	2.6
46	1o	89	GLY	2.6
6	2G	56	ALA	2.6
7	2H	44	VAL	2.6
8	2I	18	VAL	2.6
9	2N	46	VAL	2.6
15	2T	126	ALA	2.6

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Mol	Chain	Res	Type	RSRZ
34	2c	189	ALA	2.6
35	1d	170	VAL	2.6
36	1e	55	VAL	2.6
41	1j	49	VAL	2.6
45	2n	59	ALA	2.6
46	2o	60	VAL	2.6
52	2u	5	ASP	2.6
52	2u	17	THR	2.6
7	2H	29	PRO	2.6
50	2s	20	LEU	2.6
3	2D	49	ILE	2.6
29	27	18	PHE	2.6
36	2e	45	PHE	2.6
6	2G	48	GLU	2.6
1	1A	1057	A	2.6
1	2A	1847	A	2.6
31	29	24	TYR	2.6
38	2g	82	GLY	2.6
52	2u	21	TYR	2.6
53	1y	71	TYR	2.6
29	17	23	ARG	2.6
29	17	41	ARG	2.6
45	2n	23	ARG	2.6
46	1o	88	ARG	2.6
38	2g	7	ALA	2.6
7	2H	32	GLU	2.6
38	2g	16	LEU	2.6
39	1h	39	LEU	2.6
40	2i	47	LEU	2.6
36	2e	121	LYS	2.6
51	1t	45	GLN	2.6
4	2E	1	MET	2.6
32	1a	1002	G	2.6
32	1a	1032	G	2.6
32	2a	1064	G	2.6
39	1h	102	ARG	2.6
45	2n	3	ARG	2.6
50	2s	65	ASN	2.6
1	1A	34	C	2.6
7	2H	45	VAL	2.5
40	1i	28	VAL	2.5
9	2N	83	LYS	2.5

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Mol	Chain	Res	Type	RSRZ
33	2b	121	LEU	2.5
44	2m	39	ILE	2.5
48	2q	59	ILE	2.5
23	2l	29	GLY	2.5
6	2G	164	GLU	2.5
21	2Z	188	ALA	2.5
4	2E	116	VAL	2.5
27	15	60	VAL	2.5
30	28	14	VAL	2.5
32	1a	999	C	2.5
8	2I	5	LEU	2.5
39	1h	63	LEU	2.5
50	1s	15	LEU	2.5
1	2A	1026	U	2.5
35	1d	50	ARG	2.5
52	1u	10	ARG	2.5
6	2G	178	PHE	2.5
36	1e	6	PHE	2.5
36	1e	89	ILE	2.5
39	2h	45	ILE	2.5
43	1l	7	ILE	2.5
36	2e	22	GLY	2.5
41	1j	73	ASP	2.5
3	2D	252	TRP	2.5
4	2E	123	ALA	2.5
32	1a	1005	A	2.5
35	1d	111	ALA	2.5
40	2i	31	GLN	2.5
40	2i	49	PRO	2.5
5	2F	62	ARG	2.5
41	2j	64	GLU	2.5
44	2m	67	GLU	2.5
32	2a	1532	U	2.5
20	2Y	44	ILE	2.5
33	2b	38	GLY	2.5
40	1i	117	HIS	2.5
45	1n	17	LYS	2.5
49	2r	29	PHE	2.5
41	1j	59	SER	2.5
4	2E	120	TRP	2.5
19	1X	68	ARG	2.5
34	1c	85	ARG	2.5

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Mol	Chain	Res	Type	RSRZ
34	1c	167	TRP	2.5
21	1Z	189	ALA	2.5
26	14	53	GLU	2.5
40	2i	15	ALA	2.5
1	1A	2169	A	2.5
6	2G	36	LYS	2.5
19	2X	33	LYS	2.5
23	11	98	LEU	2.5
32	2a	1349	A	2.5
35	2d	120	LEU	2.5
43	1l	91	LYS	2.5
44	2m	92	HIS	2.5
41	2j	59	SER	2.5
35	1d	159	ARG	2.5
40	1i	121	ARG	2.5
3	2D	40	THR	2.5
12	2Q	22	LYS	2.5
16	2U	2	PRO	2.5
41	1j	26	ALA	2.5
44	2m	72	ALA	2.5
45	2n	58	LYS	2.5
50	2s	42	PRO	2.5
41	1j	17	ASP	2.5
3	1D	37	LEU	2.5
8	2I	34	GLY	2.5
9	2N	98	VAL	2.5
25	23	54	VAL	2.5
35	1d	68	TYR	2.5
35	2d	2	GLY	2.5
35	2d	20	TYR	2.5
39	2h	131	GLY	2.5
21	2Z	124	ILE	2.5
31	29	9	ARG	2.5
1	2A	1816	G	2.5
1	2A	2121	G	2.5
7	2H	21	PRO	2.5
6	2G	24	GLY	2.5
7	2H	78	GLY	2.5
6	2G	12	TYR	2.5
7	2H	164	TYR	2.5
14	2S	101	LEU	2.5
34	2c	184	TYR	2.5

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Mol	Chain	Res	Type	RSRZ
36	2e	33	VAL	2.5
41	2j	16	LEU	2.5
46	1o	29	VAL	2.5
43	1l	89	ARG	2.5
48	2q	92	ARG	2.5
32	2a	1236	A	2.5
39	1h	86	ILE	2.5
1	2A	2302	G	2.5
32	2a	1131	G	2.5
40	2i	64	THR	2.5
42	1k	60	ALA	2.5
43	2l	14	GLY	2.5
53	2y	85	LEU	2.4
23	2l	51	VAL	2.4
26	24	21	VAL	2.4
26	24	28	LYS	2.4
33	2b	229	VAL	2.4
38	2g	66	VAL	2.4
41	1j	44	VAL	2.4
48	2q	10	VAL	2.4
1	1A	1026	U	2.4
32	2a	1348	U	2.4
4	2E	141	ILE	2.4
15	2T	110	ILE	2.4
33	1b	222	ILE	2.4
6	2G	99	MET	2.4
2	2B	52	A	2.4
35	1d	168	ARG	2.4
8	2I	123	LEU	2.4
14	2S	110	LEU	2.4
20	2Y	90	LEU	2.4
35	1d	174	LEU	2.4
44	2m	90	LEU	2.4
31	29	23	VAL	2.4
44	1m	117	VAL	2.4
52	2u	18	TYR	2.4
3	2D	53	PHE	2.4
6	2G	141	PHE	2.4
33	1b	101	MET	2.4
1	1A	229	A	2.4
33	1b	26	PRO	2.4
34	2c	4	LYS	2.4

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Mol	Chain	Res	Type	RSRZ
38	2g	5	ARG	2.4
41	1j	10	GLY	2.4
52	1u	2	GLY	2.4
6	2G	60	LEU	2.4
6	2G	106	LEU	2.4
43	1l	10	LEU	2.4
6	2G	159	VAL	2.4
15	2T	72	VAL	2.4
44	2m	17	VAL	2.4
26	24	65	ASP	2.4
1	1A	2166	G	2.4
1	2A	2122	U	2.4
1	2A	2319	G	2.4
38	2g	44	TYR	2.4
9	2N	71	ILE	2.4
35	1d	166	LYS	2.4
39	2h	38	ILE	2.4
46	2o	48	LYS	2.4
6	2G	100	TRP	2.4
7	2H	95	ARG	2.4
40	1i	37	PHE	2.4
16	2U	73	GLY	2.4
53	2y	30	TRP	2.4
44	2m	113	PRO	2.4
40	1i	122	ALA	2.4
8	2I	30	LEU	2.4
36	2e	123	LEU	2.4
43	1l	62	SER	2.4
35	2d	198	VAL	2.4
39	1h	53	VAL	2.4
40	2i	78	LYS	2.4
45	2n	18	VAL	2.4
48	1q	63	ARG	2.4
10	1O	47	ILE	2.4
37	2f	97	PHE	2.4
32	2a	1258	G	2.4
10	1O	108	GLU	2.4
40	2i	27	THR	2.4
7	2H	42	ARG	2.4
32	2a	1249	C	2.4
32	2a	1288	A	2.4
35	1d	78	LEU	2.4

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Mol	Chain	Res	Type	RSRZ
51	1t	83	ARG	2.4
41	2j	24	VAL	2.4
38	2g	31	MET	2.4
38	2g	113	GLU	2.4
16	2U	113	ALA	2.4
17	1V	77	ALA	2.4
29	17	20	ALA	2.4
36	1e	134	ALA	2.4
38	2g	2	ALA	2.4
33	2b	209	ARG	2.4
35	2d	21	LEU	2.4
35	2d	96	LEU	2.4
1	1A	2138	C	2.4
1	2A	1084	A	2.4
7	2H	113	VAL	2.4
44	2m	54	VAL	2.4
44	2m	98	VAL	2.4
48	2q	73	VAL	2.4
39	1h	98	LYS	2.4
44	2m	22	ILE	2.4
34	2c	186	PHE	2.4
14	2S	102	ALA	2.4
30	28	46	ARG	2.4
44	2m	28	ALA	2.4
45	1n	29	ARG	2.4
50	2s	13	ASP	2.4
40	2i	82	ALA	2.4
53	2y	21	ALA	2.4
48	1q	66	SER	2.4
3	1D	47	GLY	2.3
35	2d	56	VAL	2.3
43	2l	104	VAL	2.3
1	2A	2177	C	2.3
32	2a	1140	C	2.3
6	1G	88	ILE	2.3
6	2G	33	ARG	2.3
20	2Y	89	PHE	2.3
25	23	30	ARG	2.3
26	24	51	ASP	2.3
23	21	43	TYR	2.3
39	1h	94	TYR	2.3
45	1n	16	PHE	2.3

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Mol	Chain	Res	Type	RSRZ
11	2P	149	GLU	2.3
6	2G	124	SER	2.3
33	1b	61	LEU	2.3
16	2U	25	TRP	2.3
1	2A	2100	G	2.3
7	2H	107	VAL	2.3
15	2T	70	VAL	2.3
38	2g	135	VAL	2.3
32	2a	1219	U	2.3
38	2g	94	ARG	2.3
1	1A	889	C	2.3
25	23	13	ILE	2.3
35	1d	24	GLU	2.3
36	2e	11	ILE	2.3
50	2s	44	MET	2.3
32	2a	1111	A	2.3
50	2s	74	PHE	2.3
7	2H	30	LYS	2.3
34	2c	187	ALA	2.3
35	2d	48	ALA	2.3
51	1t	70	SER	2.3
38	2g	130	GLY	2.3
29	27	42	LEU	2.3
14	2S	30	ARG	2.3
29	27	23	ARG	2.3
40	1i	120	ARG	2.3
44	2m	91	ARG	2.3
4	1E	163	GLU	2.3
8	2I	107	VAL	2.3
50	2s	12	ASP	2.3
32	2a	1358	U	2.3
3	2D	15	PHE	2.3
32	2a	1114	C	2.3
1	2A	2114	A	2.3
3	1D	240	ALA	2.3
10	1O	11	ALA	2.3
38	2g	148	ASN	2.3
45	2n	30	ALA	2.3
51	2t	9	ASN	2.3
40	2i	30	GLY	2.3
11	2P	6	LEU	2.3
24	22	61	LEU	2.3

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Mol	Chain	Res	Type	RSRZ
38	2g	101	LEU	2.3
48	1q	6	LEU	2.3
30	28	29	LYS	2.3
45	1n	14	PRO	2.3
53	2y	20	VAL	2.3
1	2A	1081	U	2.3
30	28	25	MET	2.3
47	1p	1	MET	2.3
33	1b	127	ILE	2.3
36	2e	109	ILE	2.3
39	2h	134	ILE	2.3
1	1A	2174	C	2.3
4	2E	115	GLY	2.3
22	10	42	GLY	2.3
27	25	14	ALA	2.3
33	1b	207	ALA	2.3
35	2d	149	ALA	2.3
36	1e	146	ALA	2.3
45	1n	28	GLY	2.3
45	2n	28	GLY	2.3
51	1t	32	ALA	2.3
1	2A	2184	G	2.3
2	2B	54	G	2.3
17	2V	81	TYR	2.3
38	1g	85	TYR	2.3
41	2j	15	THR	2.3
32	2a	1306	A	2.3
7	2H	71	LEU	2.3
12	2Q	79	LEU	2.3
53	1y	66	LYS	2.3
41	2j	37	PRO	2.3
32	1a	204	U	2.3
17	1V	70	ILE	2.3
35	1d	73	ARG	2.3
40	2i	16	ARG	2.3
50	1s	72	GLY	2.3
51	2t	55	ILE	2.3
53	2y	16	ILE	2.3
53	2y	74	ILE	2.3
24	12	13	ALA	2.3
43	2l	47	LYS	2.3
51	2t	38	LYS	2.3

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Mol	Chain	Res	Type	RSRZ
6	2G	165	THR	2.3
44	2m	103	THR	2.3
53	1y	46	GLN	2.3
53	2y	72	THR	2.3
32	2a	1354	C	2.3
45	2n	24	CYS	2.3
38	1g	12	LEU	2.3
32	1a	220	G	2.3
38	2g	123	GLU	2.3
20	2Y	72	VAL	2.3
23	2l	26	ARG	2.3
12	1Q	7	MET	2.3
34	1c	10	PHE	2.3
34	1c	168	ALA	2.3
34	2c	22	TRP	2.3
41	1j	4	ILE	2.3
48	1q	90	ILE	2.3
50	2s	63	THR	2.3
43	2l	99	HIS	2.3
1	2A	2103	C	2.3
3	2D	147	LEU	2.3
22	20	75	LEU	2.3
35	2d	7	PRO	2.2
1	2A	1056	G	2.2
11	2P	118	GLY	2.2
23	2l	30	VAL	2.2
35	1d	124	GLY	2.2
44	1m	74	VAL	2.2
6	1G	80	PHE	2.2
7	2H	165	ALA	2.2
21	2Z	88	PHE	2.2
34	2c	71	ALA	2.2
40	1i	15	ALA	2.2
42	2k	15	ALA	2.2
3	2D	54	ARG	2.2
4	2E	182	LEU	2.2
12	2Q	17	LEU	2.2
33	1b	187	LEU	2.2
39	2h	119	LEU	2.2
44	2m	115	LYS	2.2
46	1o	57	LEU	2.2
48	2q	95	TYR	2.2

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Mol	Chain	Res	Type	RSRZ
52	1u	9	ARG	2.2
53	2y	36	ASN	2.2
1	2A	2310	A	2.2
35	2d	143	GLY	2.2
8	1I	3	VAL	2.2
23	2I	53	VAL	2.2
7	2H	159	GLU	2.2
40	1i	126	SER	2.2
32	2a	1343	G	2.2
32	2a	1347	G	2.2
41	1j	96	ILE	2.2
11	2P	51	PHE	2.2
43	2l	28	LYS	2.2
51	1t	67	ALA	2.2
38	2g	3	ARG	2.2
7	2H	105	LEU	2.2
21	2Z	150	LEU	2.2
34	2c	115	LEU	2.2
41	2j	8	LEU	2.2
51	1t	53	LEU	2.2
23	1l	68	PRO	2.2
30	28	2	PRO	2.2
44	2m	41	PRO	2.2
53	2y	37	PRO	2.2
6	2G	27	ASN	2.2
34	2c	139	GLN	2.2
8	2I	41	GLU	2.2
32	1a	219	C	2.2
32	2a	1260	C	2.2
7	2H	27	LYS	2.2
7	2H	41	MET	2.2
6	2G	163	ALA	2.2
14	2S	66	ALA	2.2
38	2g	100	ALA	2.2
41	1j	5	ARG	2.2
45	1n	7	ILE	2.2
17	2V	92	THR	2.2
36	2e	26	PHE	2.2
42	1k	125	PHE	2.2
49	2r	47	THR	2.2
13	2R	20	LEU	2.2
21	2Z	61	LEU	2.2

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Mol	Chain	Res	Type	RSRZ
41	2j	39	PRO	2.2
6	2G	154	GLY	2.2
3	2D	275	LYS	2.2
46	1o	78	TYR	2.2
11	1P	15	ARG	2.2
14	2S	23	ARG	2.2
23	21	76	ARG	2.2
32	2a	1321	C	2.2
38	2g	105	VAL	2.2
44	2m	80	ARG	2.2
48	1q	85	VAL	2.2
50	2s	51	VAL	2.2
53	1y	49	VAL	2.2
6	2G	50	ALA	2.2
27	15	18	ALA	2.2
34	1c	124	ILE	2.2
41	2j	100	THR	2.2
42	2k	21	ILE	2.2
45	1n	59	ALA	2.2
36	2e	135	THR	2.2
53	2y	82	GLU	2.2
13	2R	67	LEU	2.2
51	1t	62	LEU	2.2
7	2H	83	TYR	2.2
33	1b	175	ARG	2.2
38	1g	32	ARG	2.2
3	2D	226	MET	2.2
1	1A	1963	U	2.2
22	20	23	VAL	2.2
33	1b	19	HIS	2.2
34	2c	198	VAL	2.2
38	2g	91	VAL	2.2
53	1y	70	MET	2.2
18	1W	32	ALA	2.2
34	1c	160	ALA	2.2
10	1O	22	ILE	2.2
21	2Z	133	ILE	2.2
39	1h	38	ILE	2.2
16	2U	44	ASN	2.2
40	2i	37	PHE	2.2
53	2y	69	ASP	2.2
9	2N	107	LEU	2.2

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Mol	Chain	Res	Type	RSRZ
22	20	52	GLY	2.2
33	1b	131	PRO	2.2
33	1b	215	LEU	2.2
7	2H	157	TYR	2.2
48	2q	86	GLU	2.2
8	2I	1	MET	2.2
40	2i	77	ILE	2.2
44	2m	106	ASN	2.2
52	1u	17	THR	2.2
6	2G	117	PHE	2.2
12	2Q	6	ARG	2.2
28	16	41	PRO	2.2
51	1t	23	ARG	2.2
1	2A	878	A	2.2
6	2G	175	LEU	2.2
33	2b	51	LEU	2.2
46	2o	57	LEU	2.2
41	1j	25	GLU	2.2
13	2R	5	LYS	2.1
41	1j	35	SER	2.2
49	2r	68	LYS	2.1
21	2Z	175	VAL	2.1
23	11	49	VAL	2.1
23	21	70	VAL	2.1
21	1Z	188	ALA	2.1
29	27	20	ALA	2.1
44	1m	107	ALA	2.1
3	2D	167	GLY	2.1
11	2P	109	GLY	2.1
12	1Q	5	ARG	2.1
41	2j	36	GLY	2.1
44	2m	3	ARG	2.1
44	2m	114	ARG	2.1
51	2t	25	ARG	2.1
26	24	31	ILE	2.1
33	1b	211	ILE	2.1
1	1A	2108	C	2.1
1	1A	2137	C	2.1
1	2A	2178	C	2.1
1	2A	2185	C	2.1
32	2a	1066	C	2.1
19	2X	66	LEU	2.1

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Mol	Chain	Res	Type	RSRZ
23	11	46	LEU	2.1
25	23	53	LEU	2.1
27	15	58	LEU	2.1
35	2d	78	LEU	2.1
35	2d	186	LEU	2.1
47	1p	6	LEU	2.1
49	2r	58	LEU	2.1
46	2o	47	LYS	2.1
32	2a	780	A	2.1
33	1b	135	GLN	2.1
3	2D	200	ASP	2.1
6	2G	11	TYR	2.1
6	2G	150	ASP	2.1
3	2D	51	VAL	2.1
8	2I	43	ASN	2.1
33	2b	217	ARG	2.1
35	1d	178	VAL	2.1
41	1j	60	ARG	2.1
44	2m	11	ARG	2.1
47	2p	38	TYR	2.1
14	1S	66	ALA	2.1
42	2k	19	ALA	2.1
10	2O	65	THR	2.1
15	2T	75	ILE	2.1
22	20	47	PRO	2.1
24	22	57	ILE	2.1
32	2a	951	G	2.1
33	1b	194	PRO	2.1
34	2c	57	ILE	2.1
33	2b	187	LEU	2.1
13	2R	14	SER	2.1
1	1A	1847	A	2.1
2	2B	59	A	2.1
19	1X	60	ARG	2.1
32	2a	1374	A	2.1
3	2D	35	LYS	2.1
5	2F	105	VAL	2.1
23	2I	4	VAL	2.1
28	16	40	CYS	2.1
35	1d	38	TYR	2.1
40	2i	68	GLY	2.1
6	2G	158	ALA	2.1

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Mol	Chain	Res	Type	RSRZ
33	1b	29	ALA	2.1
36	2e	94	ALA	2.1
40	2i	41	VAL	2.1
45	1n	10	ALA	2.1
48	1q	35	VAL	2.1
12	1Q	21	THR	2.1
21	2Z	120	ILE	2.1
30	28	16	ILE	2.1
38	2g	103	TRP	2.1
17	2V	20	LEU	2.1
41	1j	90	LEU	2.1
43	2l	33	ARG	2.1
44	2m	108	ARG	2.1
53	1y	42	SER	2.1
38	2g	33	ASP	2.1
40	2i	116	LYS	2.1
6	2G	42	GLY	2.1
42	2k	17	GLY	2.1
47	1p	37	GLY	2.1
1	2A	1086	A	2.1
6	2G	69	ALA	2.1
8	2I	37	VAL	2.1
30	28	24	ALA	2.1
34	1c	180	ALA	2.1
34	2c	120	VAL	2.1
42	1k	74	ALA	2.1
16	1U	2	PRO	2.1
29	17	31	LEU	2.1
35	1d	176	LEU	2.1
40	2i	97	LYS	2.1
34	1c	63	ASN	2.1
2	2B	43	C	2.1
1	2A	2158	A	2.1
3	2D	141	VAL	2.1
40	1i	14	VAL	2.1
46	1o	27	VAL	2.1
8	2I	25	TYR	2.1
19	2X	18	TYR	2.1
31	29	22	ARG	2.1
43	2l	69	TYR	2.1
44	2m	104	ARG	2.1
51	1t	80	ARG	2.1

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Mol	Chain	Res	Type	RSRZ
53	2y	83	ARG	2.1
52	1u	13	ILE	2.1
6	2G	103	LEU	2.1
33	2b	11	LEU	2.1
33	2b	113	HIS	2.1
4	1E	112	GLY	2.1
11	2P	38	GLN	2.1
53	2y	89	GLN	2.1
20	2Y	5	MET	2.1
14	2S	57	LYS	2.1
34	1c	174	PRO	2.1
36	1e	138	ALA	2.1
22	20	79	VAL	2.1
4	1E	160	TYR	2.1
30	28	64	TYR	2.1
3	1D	106	ILE	2.1
35	1d	158	ILE	2.1
41	1j	98	ILE	2.1
53	1y	78	ILE	2.1
14	2S	56	LEU	2.1
21	2Z	18	LEU	2.1
30	28	61	LEU	2.1
33	2b	216	SER	2.1
35	1d	137	SER	2.1
45	2n	47	LEU	2.1
46	1o	67	LEU	2.1
51	2t	62	LEU	2.1
22	10	54	GLY	2.1
26	14	45	GLY	2.1
34	2c	104	GLN	2.1
49	2r	57	GLY	2.1
53	2y	68	GLU	2.1
11	2P	15	ARG	2.1
29	27	41	ARG	2.1
34	1c	45	LYS	2.1
50	2s	78	ARG	2.1
52	1u	22	ARG	2.1
53	2y	23	ARG	2.1
1	2A	1041	C	2.0
6	2G	179	PRO	2.0
12	2Q	4	PRO	2.0
13	2R	39	PRO	2.0

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Mol	Chain	Res	Type	RSRZ
16	2U	96	ALA	2.0
33	2b	188	ALA	2.0
33	1b	184	VAL	2.0
39	2h	95	VAL	2.0
32	1a	1024	G	2.0
12	2Q	64	ILE	2.0
16	2U	17	ILE	2.0
40	2i	23	ASN	2.0
41	2j	50	ILE	2.0
1	1A	2790	A	2.0
53	2y	61	LEU	2.0
50	2s	84	GLY	2.0
3	1D	276	LYS	2.0
21	2Z	201	LYS	2.0
43	1l	47	LYS	2.0
50	2s	6	LYS	2.0
33	2b	23	ARG	2.0
52	2u	7	ARG	2.0
12	1Q	41	TRP	2.0
53	1y	30	TRP	2.0
4	1E	123	ALA	2.0
4	2E	46	ALA	2.0
5	2F	42	ALA	2.0
40	1i	76	ALA	2.0
3	2D	221	VAL	2.0
21	1Z	86	VAL	2.0
26	14	57	GLU	2.0
50	2s	47	HIS	2.0
53	2y	93	GLU	2.0
33	2b	95	GLN	2.0
48	1q	26	GLN	2.0
48	2q	97	SER	2.0
4	2E	139	GLY	2.0
8	1I	88	ILE	2.0
52	2u	12	LYS	2.0
6	2G	91	ARG	2.0
9	2N	82	LEU	2.0
25	23	26	LEU	2.0
35	1d	69	GLY	2.0
33	2b	152	PHE	2.0
35	1d	132	ARG	2.0
38	1g	16	LEU	2.0

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Mol	Chain	Res	Type	RSRZ
19	2X	28	PHE	2.0
22	20	69	PHE	2.0
35	2d	75	PHE	2.0
47	2p	9	PHE	2.0
51	2t	22	ARG	2.0
32	2a	1187	G	2.0
1	1A	529	A	2.0
32	1a	1004	A	2.0
32	2a	532	A	2.0
3	2D	237	GLU	2.0
27	15	7	PRO	2.0
29	17	40	TRP	2.0
5	2F	53	THR	2.0
6	2G	26	GLN	2.0
6	2G	55	LYS	2.0
8	1I	131	LYS	2.0
24	22	49	LYS	2.0
36	2e	17	ALA	2.0
45	2n	52	GLN	2.0
15	1T	28	VAL	2.0
22	20	12	ASN	2.0
34	1c	173	VAL	2.0
47	2p	79	VAL	2.0
13	1R	92	GLY	2.0
22	20	77	ARG	2.0
34	2c	185	GLY	2.0
35	1d	118	ARG	2.0
38	2g	95	ARG	2.0
32	2a	1320	C	2.0
32	2a	1344	C	2.0
30	18	50	LEU	2.0
33	2b	222	ILE	2.0
47	2p	49	LEU	2.0
45	2n	36	PHE	2.0
52	1u	18	TYR	2.0
21	1Z	203	GLU	2.0
33	2b	143	GLU	2.0
43	2l	16	GLU	2.0
1	1A	2133	G	2.0
9	1N	118	LYS	2.0
31	29	15	LYS	2.0
32	1a	1493	A	2.0

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Mol	Chain	Res	Type	RSRZ
32	2a	971	G	2.0
32	2a	1371	G	2.0
40	1i	112	LYS	2.0
47	1p	41	PRO	2.0
53	1y	9	GLN	2.0

6.2 Non-standard residues in protein, DNA, RNA chains [i](#)

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 95th percentile and maximum values of B factors of atoms in the group. The column labelled 'Q<0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
1	5MU	2A	1915	21/22	0.84	0.15	85,90,94,108	0
32	2MG	2a	1207	24/25	0.87	0.20	87,93,99,103	0
1	5MU	1A	1915	21/22	0.89	0.19	75,82,90,93	0
32	M2G	2a	966	25/26	0.90	0.17	70,75,90,97	0
32	5MC	2a	967	21/22	0.91	0.19	75,80,86,92	0
1	PSU	2A	1917	20/21	0.92	0.16	80,85,95,100	0
43	0TD	1l	92	10/11	0.92	0.19	59,62,66,79	0
32	4OC	2a	1402	22/23	0.92	0.19	68,72,77,81	0
32	5MC	2a	1404	21/22	0.92	0.24	65,72,77,79	0
1	PSU	1A	1917	20/21	0.93	0.15	66,75,86,86	0
43	0TD	2l	92	10/11	0.93	0.15	68,72,75,85	0
32	5MC	1a	967	21/22	0.94	0.21	63,69,77,82	0
1	PSU	2A	1911	20/21	0.94	0.14	72,75,83,91	0
1	OMC	2A	1920	21/22	0.94	0.19	70,74,81,84	0
32	PSU	1a	516	20/21	0.95	0.20	65,69,73,75	0
1	PSU	1A	1911	20/21	0.95	0.16	64,73,76,86	0
32	5MC	2a	1400	21/22	0.95	0.28	73,80,82,85	0
32	PSU	2a	516	20/21	0.95	0.15	77,81,88,88	0
32	G7M	2a	527	24/25	0.95	0.17	75,77,79,84	0
32	5MC	2a	1407	21/22	0.95	0.17	63,72,76,82	0
32	MA6	2a	1518	24/25	0.95	0.21	66,73,78,78	0
32	MA6	2a	1519	24/25	0.95	0.30	64,74,78,79	0
32	2MG	1a	1207	24/25	0.95	0.15	73,78,81,83	0
32	MA6	1a	1518	24/25	0.96	0.24	47,53,57,58	0
32	M2G	1a	966	25/26	0.96	0.18	49,62,70,80	0
32	G7M	1a	527	24/25	0.97	0.19	51,57,62,65	0
32	MA6	1a	1519	24/25	0.97	0.24	49,54,59,61	0
32	5MC	1a	1400	21/22	0.97	0.19	49,57,63,63	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
32	4OC	1a	1402	22/23	0.97	0.22	51,60,65,67	0
32	5MC	1a	1404	21/22	0.97	0.19	50,54,57,61	0
32	5MC	1a	1407	21/22	0.97	0.21	56,61,66,72	0
32	UR3	1a	1498	21/22	0.97	0.21	52,57,60,70	0
1	5MC	2A	1962	21/22	0.97	0.19	45,52,59,65	0
1	OMG	2A	2251	24/25	0.97	0.19	43,47,50,51	0
32	UR3	2a	1498	21/22	0.97	0.22	64,70,75,78	0
1	2MA	2A	2503	23/24	0.97	0.22	35,43,47,49	0
1	2MU	2A	2552	21/23	0.97	0.21	41,45,50,54	0
1	PSU	2A	2605	20/21	0.97	0.21	37,45,51,51	0
1	5MC	1A	1942	21/22	0.98	0.20	39,43,47,49	0
1	5MC	1A	1962	21/22	0.98	0.19	34,42,47,51	0
1	OMG	1A	2251	24/25	0.98	0.23	26,32,35,37	0
1	2MA	1A	2503	23/24	0.98	0.24	24,28,32,33	0
1	5MU	2A	1939	21/22	0.98	0.22	38,45,49,51	0
1	5MC	2A	1942	21/22	0.98	0.20	53,59,62,75	0
1	2MU	1A	2552	21/23	0.98	0.23	29,36,38,45	0
1	OMC	1A	1920	21/22	0.98	0.21	56,64,67,69	0
1	PSU	1A	2605	20/21	0.99	0.21	29,34,37,38	0
1	5MU	1A	1939	21/22	0.99	0.22	30,35,38,41	0

6.3 Carbohydrates [i](#)

There are no monosaccharides in this entry.

6.4 Ligands [i](#)

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 95th percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	1A	3379	1/1	0.22	0.15	41,41,41,41	0
54	MG	2A	3261	1/1	0.22	0.18	81,81,81,81	0
54	MG	1A	3769	1/1	0.24	0.22	73,73,73,73	0
54	MG	1A	3723	1/1	0.24	0.42	71,71,71,71	0
54	MG	2a	3010	1/1	0.33	0.16	92,92,92,92	0
54	MG	1a	1604	1/1	0.34	0.23	77,77,77,77	0
54	MG	1a	1824	1/1	0.35	0.25	84,84,84,84	0
59	ZN	24	501	1/1	0.35	0.07	140,140,140,140	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	2A	3623	1/1	0.38	0.23	44,44,44,44	0
54	MG	2A	3638	1/1	0.38	0.15	70,70,70,70	0
54	MG	2a	3059	1/1	0.39	0.29	91,91,91,91	0
54	MG	1A	3458	1/1	0.39	0.23	56,56,56,56	0
54	MG	1a	1680	1/1	0.40	0.21	87,87,87,87	0
54	MG	2A	3207	1/1	0.40	0.26	73,73,73,73	0
54	MG	2A	3581	1/1	0.41	0.17	70,70,70,70	0
54	MG	2a	3106	1/1	0.41	0.15	86,86,86,86	0
54	MG	1g	202	1/1	0.41	0.22	83,83,83,83	0
54	MG	1a	1629	1/1	0.42	0.33	76,76,76,76	0
54	MG	2A	3095	1/1	0.44	0.16	81,81,81,81	0
54	MG	1a	1878	1/1	0.46	0.13	93,93,93,93	0
54	MG	2a	3099	1/1	0.46	0.17	77,77,77,77	0
54	MG	1A	4035	1/1	0.47	0.20	66,66,66,66	0
54	MG	1A	3939	1/1	0.47	0.09	69,69,69,69	0
54	MG	2A	3240	1/1	0.48	0.16	68,68,68,68	0
54	MG	1a	1704	1/1	0.48	0.30	81,81,81,81	0
54	MG	1A	3853	1/1	0.48	0.15	64,64,64,64	0
54	MG	1A	3330	1/1	0.48	0.27	64,64,64,64	0
54	MG	2A	3231	1/1	0.48	0.25	75,75,75,75	0
54	MG	2O	202	1/1	0.49	0.14	87,87,87,87	0
54	MG	1A	3384	1/1	0.50	0.18	63,63,63,63	0
54	MG	2A	3635	1/1	0.50	0.51	69,69,69,69	0
54	MG	2A	3568	1/1	0.50	0.12	82,82,82,82	0
54	MG	2A	3649	1/1	0.50	0.10	69,69,69,69	0
54	MG	1A	3998	1/1	0.50	0.22	55,55,55,55	0
54	MG	1A	3942	1/1	0.51	0.14	60,60,60,60	0
54	MG	2A	3192	1/1	0.51	0.26	82,82,82,82	0
54	MG	2A	3485	1/1	0.52	0.19	82,82,82,82	0
54	MG	2A	3087	1/1	0.52	0.09	90,90,90,90	0
54	MG	1a	1774	1/1	0.52	0.12	87,87,87,87	0
54	MG	2A	3162	1/1	0.52	0.18	76,76,76,76	0
54	MG	15	107	1/1	0.52	0.30	59,59,59,59	0
54	MG	2A	3636	1/1	0.52	0.11	79,79,79,79	0
54	MG	2A	3385	1/1	0.52	0.20	70,70,70,70	0
54	MG	1a	1670	1/1	0.53	0.14	66,66,66,66	0
54	MG	2a	3167	1/1	0.54	0.12	75,75,75,75	0
54	MG	1A	3797	1/1	0.54	0.17	46,46,46,46	0
54	MG	2G	201	1/1	0.55	0.10	86,86,86,86	0
54	MG	1A	3905	1/1	0.55	0.17	55,55,55,55	0
54	MG	2A	3567	1/1	0.55	0.21	87,87,87,87	0
54	MG	1A	3732	1/1	0.55	0.18	69,69,69,69	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
54	MG	1A	4001	1/1	0.56	0.21	85,85,85,85	0
54	MG	1a	1611	1/1	0.56	0.13	88,88,88,88	0
54	MG	1P	204	1/1	0.56	0.27	48,48,48,48	0
54	MG	2B	211	1/1	0.56	0.22	86,86,86,86	0
54	MG	1A	4026	1/1	0.56	0.13	66,66,66,66	0
54	MG	2A	3526	1/1	0.56	0.19	47,47,47,47	0
54	MG	1A	3586	1/1	0.57	0.10	66,66,66,66	0
54	MG	2a	3048	1/1	0.57	0.22	84,84,84,84	0
54	MG	2A	3603	1/1	0.57	0.16	45,45,45,45	0
54	MG	2a	3098	1/1	0.57	0.19	83,83,83,83	0
54	MG	2A	3652	1/1	0.57	0.12	71,71,71,71	0
54	MG	1A	3810	1/1	0.57	0.21	67,67,67,67	0
54	MG	1A	3546	1/1	0.57	0.10	66,66,66,66	0
54	MG	1a	1661	1/1	0.57	0.10	65,65,65,65	0
54	MG	1A	3262	1/1	0.58	0.27	71,71,71,71	0
54	MG	1a	1656	1/1	0.58	0.13	73,73,73,73	0
54	MG	1a	1730	1/1	0.59	0.15	75,75,75,75	0
54	MG	2A	3068	1/1	0.59	0.37	70,70,70,70	0
54	MG	2a	3016	1/1	0.60	0.28	79,79,79,79	0
54	MG	2A	3167	1/1	0.60	0.65	61,61,61,61	0
54	MG	2a	3116	1/1	0.60	0.17	87,87,87,87	0
54	MG	2A	3725	1/1	0.60	0.16	87,87,87,87	0
54	MG	2A	3630	1/1	0.60	0.12	100,100,100,100	0
54	MG	1a	1666	1/1	0.61	0.23	80,80,80,80	0
54	MG	2A	3179	1/1	0.61	0.21	76,76,76,76	0
54	MG	1a	1841	1/1	0.61	0.18	77,77,77,77	0
54	MG	1A	3906	1/1	0.61	0.20	49,49,49,49	0
54	MG	1A	3341	1/1	0.61	0.21	61,61,61,61	0
54	MG	2a	3071	1/1	0.62	0.28	69,69,69,69	0
54	MG	2a	3086	1/1	0.62	0.15	80,80,80,80	0
54	MG	1A	3488	1/1	0.62	0.18	55,55,55,55	0
54	MG	1A	3035	1/1	0.62	0.19	55,55,55,55	0
54	MG	1a	1797	1/1	0.62	0.14	95,95,95,95	0
54	MG	1A	3154	1/1	0.62	0.14	77,77,77,77	0
54	MG	2a	3129	1/1	0.62	0.11	70,70,70,70	0
54	MG	2A	3090	1/1	0.62	0.16	75,75,75,75	0
54	MG	2j	201	1/1	0.62	0.14	84,84,84,84	0
54	MG	1A	3461	1/1	0.62	0.10	66,66,66,66	0
54	MG	1a	1692	1/1	0.63	0.19	79,79,79,79	0
54	MG	2A	3052	1/1	0.63	0.14	64,64,64,64	0
54	MG	2A	3362	1/1	0.63	0.13	51,51,51,51	0
54	MG	2B	213	1/1	0.63	0.09	84,84,84,84	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	1a	1665	1/1	0.63	0.23	86,86,86,86	0
54	MG	1A	3872	1/1	0.64	0.12	69,69,69,69	0
54	MG	2a	3064	1/1	0.64	0.11	89,89,89,89	0
54	MG	2A	3298	1/1	0.64	0.11	90,90,90,90	0
54	MG	1a	1603	1/1	0.64	0.13	75,75,75,75	0
54	MG	1B	220	1/1	0.64	0.21	53,53,53,53	0
54	MG	1A	3004	1/1	0.64	0.23	52,52,52,52	0
54	MG	2A	3478	1/1	0.65	0.20	77,77,77,77	0
54	MG	2A	3074	1/1	0.65	0.18	67,67,67,67	0
54	MG	1a	1696	1/1	0.65	0.18	86,86,86,86	0
54	MG	1A	3328	1/1	0.65	0.23	70,70,70,70	0
54	MG	2A	3707	1/1	0.65	0.16	75,75,75,75	0
54	MG	1y	202	1/1	0.65	0.15	73,73,73,73	0
54	MG	2A	3112	1/1	0.65	0.11	78,78,78,78	0
54	MG	1A	3990	1/1	0.65	0.17	61,61,61,61	0
54	MG	2A	3060	1/1	0.65	0.22	67,67,67,67	0
54	MG	1a	1772	1/1	0.65	0.10	92,92,92,92	0
54	MG	2A	3632	1/1	0.65	0.11	64,64,64,64	0
54	MG	2A	3452	1/1	0.65	0.11	69,69,69,69	0
54	MG	2a	3026	1/1	0.65	0.15	75,75,75,75	0
54	MG	2A	3607	1/1	0.66	0.09	74,74,74,74	0
54	MG	2A	3218	1/1	0.66	0.17	73,73,73,73	0
54	MG	18	101	1/1	0.66	0.14	74,74,74,74	0
54	MG	1A	3477	1/1	0.66	0.13	66,66,66,66	0
54	MG	2A	3249	1/1	0.66	0.17	69,69,69,69	0
54	MG	2A	3559	1/1	0.66	0.08	64,64,64,64	0
54	MG	1F	314	1/1	0.66	0.22	52,52,52,52	0
54	MG	1A	3921	1/1	0.66	0.10	60,60,60,60	0
54	MG	2A	3094	1/1	0.66	0.22	89,89,89,89	0
54	MG	1A	3697	1/1	0.66	0.13	68,68,68,68	0
54	MG	2a	3061	1/1	0.66	0.14	84,84,84,84	0
54	MG	2A	3501	1/1	0.67	0.14	75,75,75,75	0
54	MG	1a	1655	1/1	0.67	0.23	59,59,59,59	0
54	MG	2A	3585	1/1	0.67	0.37	67,67,67,67	0
54	MG	2B	212	1/1	0.67	0.07	95,95,95,95	0
54	MG	2A	3592	1/1	0.67	0.12	56,56,56,56	0
54	MG	2A	3546	1/1	0.67	0.12	50,50,50,50	0
54	MG	2A	3031	1/1	0.67	0.12	84,84,84,84	0
54	MG	1A	3197	1/1	0.67	0.20	75,75,75,75	0
54	MG	1a	1784	1/1	0.68	0.11	83,83,83,83	0
54	MG	2A	3542	1/1	0.68	0.41	83,83,83,83	0
54	MG	1A	3590	1/1	0.68	0.17	61,61,61,61	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
54	MG	2A	3554	1/1	0.68	0.12	74,74,74,74	0
54	MG	1A	3844	1/1	0.68	0.44	47,47,47,47	0
54	MG	2A	3656	1/1	0.68	0.10	62,62,62,62	0
54	MG	2a	3020	1/1	0.68	0.09	66,66,66,66	0
54	MG	2A	3673	1/1	0.68	0.10	76,76,76,76	0
54	MG	1A	3321	1/1	0.68	0.30	56,56,56,56	0
54	MG	1a	1860	1/1	0.68	0.09	90,90,90,90	0
54	MG	2A	3573	1/1	0.68	0.11	49,49,49,49	0
54	MG	2A	3156	1/1	0.69	0.13	72,72,72,72	0
54	MG	1A	3668	1/1	0.69	0.15	70,70,70,70	0
54	MG	1A	3314	1/1	0.69	0.20	65,65,65,65	0
54	MG	2a	3018	1/1	0.69	0.18	69,69,69,69	0
54	MG	2A	3174	1/1	0.69	0.20	79,79,79,79	0
54	MG	1A	3969	1/1	0.69	0.24	67,67,67,67	0
54	MG	1A	3089	1/1	0.69	0.23	67,67,67,67	0
54	MG	2a	3137	1/1	0.69	0.09	80,80,80,80	0
54	MG	1A	3836	1/1	0.69	0.14	65,65,65,65	0
54	MG	2F	302	1/1	0.69	0.18	55,55,55,55	0
54	MG	2n	101	1/1	0.69	0.28	81,81,81,81	0
54	MG	1A	3606	1/1	0.69	0.27	66,66,66,66	0
54	MG	1A	3617	1/1	0.70	0.18	61,61,61,61	0
54	MG	1A	3149	1/1	0.70	0.35	66,66,66,66	0
54	MG	1A	3296	1/1	0.70	0.12	77,77,77,77	0
54	MG	1A	3821	1/1	0.70	0.14	65,65,65,65	0
54	MG	18	102	1/1	0.70	0.58	52,52,52,52	0
54	MG	1A	3833	1/1	0.70	0.13	45,45,45,45	0
54	MG	2A	3066	1/1	0.70	0.19	66,66,66,66	0
54	MG	1A	3248	1/1	0.70	0.19	73,73,73,73	0
54	MG	2e	201	1/1	0.70	0.34	77,77,77,77	0
54	MG	1A	3404	1/1	0.70	0.22	52,52,52,52	0
54	MG	2A	3441	1/1	0.70	0.12	77,77,77,77	0
54	MG	1B	226	1/1	0.70	0.18	73,73,73,73	0
54	MG	1A	3556	1/1	0.71	0.10	67,67,67,67	0
54	MG	2A	3634	1/1	0.71	0.14	70,70,70,70	0
54	MG	1a	1690	1/1	0.71	0.19	76,76,76,76	0
54	MG	1A	3805	1/1	0.71	0.22	47,47,47,47	0
54	MG	2a	3027	1/1	0.71	0.15	83,83,83,83	0
54	MG	2A	3051	1/1	0.71	0.13	55,55,55,55	0
54	MG	1A	3670	1/1	0.71	0.12	67,67,67,67	0
54	MG	2a	3060	1/1	0.71	0.14	73,73,73,73	0
54	MG	1A	3818	1/1	0.71	0.11	81,81,81,81	0
54	MG	1A	3456	1/1	0.71	0.19	41,41,41,41	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	1A	3829	1/1	0.71	0.34	39,39,39,39	0
54	MG	1A	3352	1/1	0.71	0.13	58,58,58,58	0
54	MG	2A	3712	1/1	0.71	0.14	49,49,49,49	0
54	MG	1A	3168	1/1	0.71	0.24	70,70,70,70	0
54	MG	1R	205	1/1	0.71	0.33	61,61,61,61	0
54	MG	1V	205	1/1	0.71	0.31	72,72,72,72	0
54	MG	15	105	1/1	0.71	0.22	72,72,72,72	0
54	MG	1A	3555	1/1	0.71	0.20	59,59,59,59	0
54	MG	2A	3446	1/1	0.71	0.20	65,65,65,65	0
54	MG	1a	1864	1/1	0.71	0.26	95,95,95,95	0
54	MG	20	101	1/1	0.71	0.18	59,59,59,59	0
54	MG	28	101	1/1	0.71	0.11	68,68,68,68	0
54	MG	1a	1678	1/1	0.71	0.20	55,55,55,55	0
54	MG	1i	201	1/1	0.72	0.30	76,76,76,76	0
54	MG	1A	3492	1/1	0.72	0.18	64,64,64,64	0
54	MG	2a	3087	1/1	0.72	0.14	73,73,73,73	0
54	MG	2A	3270	1/1	0.72	0.18	88,88,88,88	0
54	MG	2A	3010	1/1	0.72	0.11	73,73,73,73	0
54	MG	1a	1697	1/1	0.72	0.25	63,63,63,63	0
54	MG	2A	3558	1/1	0.72	0.10	65,65,65,65	0
54	MG	1a	1805	1/1	0.72	0.17	83,83,83,83	0
54	MG	1a	1819	1/1	0.72	0.12	72,72,72,72	0
54	MG	2A	3216	1/1	0.72	0.14	69,69,69,69	0
54	MG	1g	201	1/1	0.72	0.30	74,74,74,74	0
54	MG	2A	3155	1/1	0.72	0.36	70,70,70,70	0
54	MG	1A	3175	1/1	0.72	0.26	60,60,60,60	0
54	MG	2a	3067	1/1	0.72	0.18	95,95,95,95	0
54	MG	1a	1677	1/1	0.73	0.16	67,67,67,67	0
54	MG	2a	3047	1/1	0.73	0.35	72,72,72,72	0
54	MG	2A	3369	1/1	0.73	0.24	51,51,51,51	0
54	MG	1A	3619	1/1	0.73	0.10	42,42,42,42	0
54	MG	2A	3572	1/1	0.73	0.12	73,73,73,73	0
54	MG	2A	3399	1/1	0.73	0.17	45,45,45,45	0
54	MG	1A	3949	1/1	0.73	0.11	59,59,59,59	0
54	MG	1a	1635	1/1	0.73	0.09	82,82,82,82	0
54	MG	2A	3586	1/1	0.73	0.07	67,67,67,67	0
54	MG	1A	3953	1/1	0.73	0.17	55,55,55,55	0
54	MG	2D	312	1/1	0.73	0.23	73,73,73,73	0
54	MG	2A	3466	1/1	0.73	0.13	68,68,68,68	0
54	MG	1B	206	1/1	0.73	0.34	81,81,81,81	0
54	MG	2A	3224	1/1	0.73	0.16	66,66,66,66	0
54	MG	1A	3700	1/1	0.73	0.07	66,66,66,66	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	2A	3521	1/1	0.73	0.14	77,77,77,77	0
54	MG	2a	3006	1/1	0.73	0.14	87,87,87,87	0
54	MG	2A	3130	1/1	0.73	0.22	61,61,61,61	0
54	MG	1A	3294	1/1	0.73	0.09	83,83,83,83	0
54	MG	2A	3058	1/1	0.73	0.18	59,59,59,59	0
54	MG	1A	3996	1/1	0.73	0.08	65,65,65,65	0
54	MG	1A	3034	1/1	0.73	0.15	59,59,59,59	0
54	MG	1A	3310	1/1	0.74	0.31	59,59,59,59	0
54	MG	1d	303	1/1	0.74	0.17	76,76,76,76	0
54	MG	1a	1710	1/1	0.74	0.18	72,72,72,72	0
54	MG	1A	3647	1/1	0.74	0.20	39,39,39,39	0
54	MG	2a	3097	1/1	0.74	0.19	84,84,84,84	0
54	MG	1A	3541	1/1	0.74	0.15	65,65,65,65	0
54	MG	1D	309	1/1	0.74	0.23	64,64,64,64	0
54	MG	1A	3736	1/1	0.74	0.14	37,37,37,37	0
54	MG	2A	3253	1/1	0.74	0.18	65,65,65,65	0
54	MG	1A	3767	1/1	0.74	0.17	64,64,64,64	0
54	MG	1a	1683	1/1	0.74	0.12	66,66,66,66	0
54	MG	2a	3158	1/1	0.74	0.10	54,54,54,54	0
54	MG	1A	3607	1/1	0.74	0.12	62,62,62,62	0
54	MG	1A	3589	1/1	0.74	0.13	68,68,68,68	0
54	MG	1a	1693	1/1	0.74	0.22	88,88,88,88	0
54	MG	1A	3801	1/1	0.74	0.21	39,39,39,39	0
59	ZN	2Y	202	1/1	0.74	0.17	94,94,94,94	0
54	MG	1A	4039	1/1	0.74	0.35	66,66,66,66	0
54	MG	2a	3049	1/1	0.75	0.19	86,86,86,86	0
54	MG	2a	3056	1/1	0.75	0.13	73,73,73,73	0
54	MG	2A	3187	1/1	0.75	0.25	78,78,78,78	0
54	MG	1A	3669	1/1	0.75	0.47	44,44,44,44	0
54	MG	2A	3080	1/1	0.75	0.36	63,63,63,63	0
54	MG	1A	3640	1/1	0.75	0.40	56,56,56,56	0
54	MG	1A	3676	1/1	0.75	0.18	56,56,56,56	0
54	MG	1A	3689	1/1	0.75	0.17	65,65,65,65	0
54	MG	2A	3610	1/1	0.75	0.21	49,49,49,49	0
54	MG	2A	3025	1/1	0.75	0.13	54,54,54,54	0
54	MG	2A	3102	1/1	0.75	0.28	70,70,70,70	0
54	MG	2A	3245	1/1	0.75	0.17	66,66,66,66	0
54	MG	1A	3485	1/1	0.75	0.12	52,52,52,52	0
54	MG	2a	3005	1/1	0.75	0.31	66,66,66,66	0
54	MG	2A	3043	1/1	0.75	0.18	76,76,76,76	0
54	MG	2A	3142	1/1	0.75	0.23	76,76,76,76	0
54	MG	1A	3661	1/1	0.75	0.54	43,43,43,43	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
54	MG	1a	1623	1/1	0.75	0.15	75,75,75,75	0
54	MG	2a	3019	1/1	0.75	0.16	80,80,80,80	0
54	MG	1a	1713	1/1	0.75	0.23	77,77,77,77	0
54	MG	1A	3719	1/1	0.75	0.24	82,82,82,82	0
54	MG	2A	3665	1/1	0.75	0.06	81,81,81,81	0
54	MG	1A	3206	1/1	0.75	0.10	50,50,50,50	0
54	MG	1a	1639	1/1	0.75	0.12	74,74,74,74	0
54	MG	2A	3223	1/1	0.76	0.54	55,55,55,55	0
54	MG	1A	3196	1/1	0.76	0.67	53,53,53,53	0
54	MG	1A	3713	1/1	0.76	0.13	78,78,78,78	0
54	MG	2a	3066	1/1	0.76	0.20	82,82,82,82	0
54	MG	1a	1786	1/1	0.76	0.17	77,77,77,77	0
54	MG	1A	3601	1/1	0.76	0.27	58,58,58,58	0
54	MG	2a	3085	1/1	0.76	0.11	89,89,89,89	0
54	MG	1A	4014	1/1	0.76	0.12	93,93,93,93	0
54	MG	1A	3293	1/1	0.76	0.13	74,74,74,74	0
54	MG	1A	3848	1/1	0.76	0.17	70,70,70,70	0
54	MG	2a	3007	1/1	0.76	0.16	73,73,73,73	0
54	MG	2A	3177	1/1	0.76	0.30	59,59,59,59	0
54	MG	2a	3100	1/1	0.76	0.23	80,80,80,80	0
54	MG	1A	3110	1/1	0.76	0.31	52,52,52,52	0
54	MG	2A	3321	1/1	0.76	0.13	73,73,73,73	0
54	MG	2a	3124	1/1	0.76	0.11	74,74,74,74	0
54	MG	2A	3184	1/1	0.76	0.21	80,80,80,80	0
54	MG	2a	3134	1/1	0.76	0.39	92,92,92,92	0
54	MG	1A	3616	1/1	0.76	0.14	57,57,57,57	0
54	MG	2A	3047	1/1	0.76	0.12	74,74,74,74	0
54	MG	2A	3197	1/1	0.76	0.12	70,70,70,70	0
54	MG	1A	3664	1/1	0.76	0.15	55,55,55,55	0
54	MG	1a	1688	1/1	0.76	0.14	53,53,53,53	0
54	MG	2A	3118	1/1	0.76	0.16	74,74,74,74	0
54	MG	2A	3459	1/1	0.76	0.13	73,73,73,73	0
54	MG	2A	3462	1/1	0.76	0.12	72,72,72,72	0
54	MG	2A	3194	1/1	0.77	0.22	80,80,80,80	0
54	MG	1A	3510	1/1	0.77	0.20	31,31,31,31	0
54	MG	1A	3637	1/1	0.77	0.22	42,42,42,42	0
54	MG	1A	3204	1/1	0.77	0.18	70,70,70,70	0
54	MG	2A	3595	1/1	0.77	0.11	72,72,72,72	0
54	MG	1A	4013	1/1	0.77	0.16	66,66,66,66	0
54	MG	1A	3804	1/1	0.77	0.15	50,50,50,50	0
54	MG	1A	4017	1/1	0.77	0.20	66,66,66,66	0
54	MG	2a	3092	1/1	0.77	0.27	86,86,86,86	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
54	MG	2A	3468	1/1	0.77	0.26	82,82,82,82	0
54	MG	1A	3592	1/1	0.77	0.23	27,27,27,27	0
54	MG	1A	3809	1/1	0.77	0.12	39,39,39,39	0
54	MG	1a	1687	1/1	0.77	0.13	56,56,56,56	0
54	MG	1A	3391	1/1	0.77	0.14	58,58,58,58	0
54	MG	2A	3250	1/1	0.77	0.12	67,67,67,67	0
54	MG	1A	3814	1/1	0.77	0.15	69,69,69,69	0
54	MG	1a	1826	1/1	0.77	0.13	76,76,76,76	0
54	MG	1A	3086	1/1	0.77	0.71	50,50,50,50	0
54	MG	2A	3654	1/1	0.77	0.10	52,52,52,52	0
54	MG	2a	3139	1/1	0.77	0.20	84,84,84,84	0
54	MG	2A	3295	1/1	0.77	0.12	71,71,71,71	0
54	MG	1A	3666	1/1	0.77	0.19	70,70,70,70	0
54	MG	1A	3207	1/1	0.77	0.32	67,67,67,67	0
54	MG	1A	3560	1/1	0.77	0.09	69,69,69,69	0
54	MG	1b	301	1/1	0.77	0.21	87,87,87,87	0
54	MG	2A	3724	1/1	0.77	0.12	88,88,88,88	0
54	MG	1A	3200	1/1	0.77	0.16	86,86,86,86	0
54	MG	1A	3355	1/1	0.78	0.29	54,54,54,54	0
54	MG	2A	3017	1/1	0.78	0.13	65,65,65,65	0
54	MG	2A	3522	1/1	0.78	0.08	85,85,85,85	0
54	MG	1a	1647	1/1	0.78	0.22	63,63,63,63	0
54	MG	2A	3527	1/1	0.78	0.11	69,69,69,69	0
54	MG	2A	3120	1/1	0.78	0.32	52,52,52,52	0
54	MG	2a	3062	1/1	0.78	0.09	81,81,81,81	0
54	MG	1A	3742	1/1	0.78	0.18	50,50,50,50	0
54	MG	2A	3032	1/1	0.78	0.83	68,68,68,68	0
54	MG	1A	3455	1/1	0.78	0.21	66,66,66,66	0
54	MG	1A	3277	1/1	0.78	0.55	73,73,73,73	0
54	MG	2B	204	1/1	0.78	0.14	84,84,84,84	0
54	MG	1a	1664	1/1	0.78	0.24	76,76,76,76	0
54	MG	1A	3875	1/1	0.78	0.17	73,73,73,73	0
54	MG	2a	3088	1/1	0.78	0.24	81,81,81,81	0
54	MG	2A	3317	1/1	0.78	0.11	54,54,54,54	0
54	MG	2A	3057	1/1	0.78	0.21	51,51,51,51	0
54	MG	2A	3332	1/1	0.78	0.09	76,76,76,76	0
54	MG	2A	3175	1/1	0.78	0.19	58,58,58,58	0
54	MG	1A	3889	1/1	0.78	0.14	47,47,47,47	0
54	MG	1a	1667	1/1	0.78	0.26	74,74,74,74	0
54	MG	1A	3624	1/1	0.78	0.14	45,45,45,45	0
54	MG	1a	1716	1/1	0.78	0.23	71,71,71,71	0
54	MG	1A	3326	1/1	0.78	0.23	59,59,59,59	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
54	MG	2a	3132	1/1	0.78	0.10	71,71,71,71	0
54	MG	2A	3608	1/1	0.78	0.11	54,54,54,54	0
54	MG	1f	202	1/1	0.78	0.22	55,55,55,55	0
54	MG	2A	3083	1/1	0.78	0.39	72,72,72,72	0
54	MG	1a	1771	1/1	0.78	0.13	94,94,94,94	0
54	MG	1A	4006	1/1	0.78	0.30	54,54,54,54	0
54	MG	1A	3174	1/1	0.78	0.25	59,59,59,59	0
54	MG	1A	3529	1/1	0.78	0.13	52,52,52,52	0
54	MG	2A	3101	1/1	0.78	0.20	58,58,58,58	0
54	MG	2a	3038	1/1	0.78	0.12	94,94,94,94	0
54	MG	2A	3486	1/1	0.78	0.13	76,76,76,76	0
54	MG	1f	201	1/1	0.79	0.35	78,78,78,78	0
54	MG	1A	3238	1/1	0.79	0.16	65,65,65,65	0
54	MG	1A	3333	1/1	0.79	0.34	57,57,57,57	0
54	MG	2l	102	1/1	0.79	0.08	84,84,84,84	0
54	MG	2A	3178	1/1	0.79	0.09	71,71,71,71	0
54	MG	1a	1681	1/1	0.79	0.11	90,90,90,90	0
54	MG	1A	3308	1/1	0.79	0.64	48,48,48,48	0
54	MG	2A	3530	1/1	0.79	0.25	63,63,63,63	0
54	MG	1a	1684	1/1	0.79	0.14	70,70,70,70	0
54	MG	2A	3189	1/1	0.79	0.27	70,70,70,70	0
54	MG	1H	201	1/1	0.79	0.28	77,77,77,77	0
54	MG	2A	3555	1/1	0.79	0.08	63,63,63,63	0
54	MG	1A	3925	1/1	0.79	0.24	34,34,34,34	0
54	MG	1P	205	1/1	0.79	0.26	61,61,61,61	0
54	MG	2A	3201	1/1	0.79	0.11	58,58,58,58	0
54	MG	2a	3030	1/1	0.79	0.11	69,69,69,69	0
54	MG	2a	3037	1/1	0.79	0.14	85,85,85,85	0
54	MG	2A	3205	1/1	0.79	0.14	76,76,76,76	0
54	MG	1A	3350	1/1	0.79	0.23	63,63,63,63	0
54	MG	1A	3067	1/1	0.79	0.17	57,57,57,57	0
54	MG	1l	102	1/1	0.79	0.10	62,62,62,62	0
54	MG	1A	3014	1/1	0.79	0.16	70,70,70,70	0
54	MG	1A	3370	1/1	0.79	0.18	58,58,58,58	0
54	MG	1A	3954	1/1	0.79	0.12	55,55,55,55	0
54	MG	2A	3055	1/1	0.79	0.20	80,80,80,80	0
54	MG	1A	3373	1/1	0.79	0.23	63,63,63,63	0
54	MG	1A	3971	1/1	0.79	0.17	73,73,73,73	0
54	MG	1A	3377	1/1	0.79	0.15	41,41,41,41	0
54	MG	1a	1757	1/1	0.79	0.22	67,67,67,67	0
54	MG	2A	3616	1/1	0.79	0.20	40,40,40,40	0
54	MG	1A	3116	1/1	0.79	0.23	44,44,44,44	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	1A	3324	1/1	0.79	0.32	65,65,65,65	0
54	MG	1A	3999	1/1	0.79	0.15	75,75,75,75	0
54	MG	1A	3172	1/1	0.79	0.25	50,50,50,50	0
54	MG	1A	3327	1/1	0.79	0.42	70,70,70,70	0
54	MG	1A	4011	1/1	0.79	0.13	84,84,84,84	0
54	MG	1a	1652	1/1	0.79	0.23	74,74,74,74	0
54	MG	1A	3738	1/1	0.79	0.18	47,47,47,47	0
54	MG	2A	3367	1/1	0.79	0.14	44,44,44,44	0
54	MG	1a	1820	1/1	0.79	0.16	84,84,84,84	0
54	MG	1A	3225	1/1	0.79	0.11	77,77,77,77	0
54	MG	1A	3864	1/1	0.79	0.20	64,64,64,64	0
54	MG	2A	3407	1/1	0.79	0.18	68,68,68,68	0
54	MG	1A	3867	1/1	0.79	0.17	41,41,41,41	0
54	MG	1a	1850	1/1	0.79	0.14	72,72,72,72	0
54	MG	2A	3129	1/1	0.79	0.14	67,67,67,67	0
54	MG	2A	3457	1/1	0.79	0.10	62,62,62,62	0
54	MG	1A	3751	1/1	0.79	0.17	65,65,65,65	0
54	MG	1a	1861	1/1	0.79	0.10	84,84,84,84	0
54	MG	2a	3175	1/1	0.79	0.09	91,91,91,91	0
54	MG	1A	3561	1/1	0.79	0.19	64,64,64,64	0
54	MG	1A	3583	1/1	0.79	0.16	53,53,53,53	0
54	MG	2D	302	1/1	0.79	0.33	57,57,57,57	0
54	MG	1B	207	1/1	0.79	0.48	73,73,73,73	0
54	MG	1A	3895	1/1	0.79	0.33	60,60,60,60	0
54	MG	2a	3024	1/1	0.80	0.15	82,82,82,82	0
54	MG	1e	203	1/1	0.80	0.23	77,77,77,77	0
54	MG	1F	317	1/1	0.80	0.48	75,75,75,75	0
54	MG	1A	3351	1/1	0.80	0.26	38,38,38,38	0
54	MG	1a	1781	1/1	0.80	0.15	89,89,89,89	0
54	MG	2A	3633	1/1	0.80	0.15	70,70,70,70	0
54	MG	2a	3046	1/1	0.80	0.08	76,76,76,76	0
54	MG	1H	202	1/1	0.80	0.30	58,58,58,58	0
54	MG	1A	3781	1/1	0.80	0.20	51,51,51,51	0
54	MG	2A	3206	1/1	0.80	0.12	66,66,66,66	0
54	MG	1A	3596	1/1	0.80	0.36	64,64,64,64	0
54	MG	2a	3058	1/1	0.80	0.15	79,79,79,79	0
54	MG	2A	3005	1/1	0.80	0.24	63,63,63,63	0
54	MG	1A	3084	1/1	0.80	0.26	54,54,54,54	0
54	MG	1a	1691	1/1	0.80	0.12	65,65,65,65	0
54	MG	2A	3113	1/1	0.80	0.10	76,76,76,76	0
54	MG	2A	3024	1/1	0.80	0.11	67,67,67,67	0
54	MG	1A	3587	1/1	0.80	0.19	61,61,61,61	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	1a	1657	1/1	0.80	0.07	77,77,77,77	0
54	MG	2a	3070	1/1	0.80	0.16	72,72,72,72	0
54	MG	1A	3703	1/1	0.80	0.21	71,71,71,71	0
54	MG	2A	3528	1/1	0.80	0.20	66,66,66,66	0
54	MG	2A	3132	1/1	0.80	0.12	62,62,62,62	0
54	MG	2B	201	1/1	0.80	0.14	86,86,86,86	0
54	MG	2A	3534	1/1	0.80	0.17	63,63,63,63	0
54	MG	2A	3138	1/1	0.80	0.30	66,66,66,66	0
54	MG	1a	1834	1/1	0.80	0.34	69,69,69,69	0
54	MG	1A	3976	1/1	0.80	0.19	76,76,76,76	0
54	MG	2A	3273	1/1	0.80	0.11	80,80,80,80	0
54	MG	2D	308	1/1	0.80	0.31	50,50,50,50	0
54	MG	2A	3279	1/1	0.80	0.19	66,66,66,66	0
54	MG	2A	3286	1/1	0.80	0.14	70,70,70,70	0
54	MG	1A	3981	1/1	0.80	0.26	58,58,58,58	0
54	MG	1a	1856	1/1	0.80	0.21	70,70,70,70	0
54	MG	2R	203	1/1	0.80	0.20	56,56,56,56	0
54	MG	2A	3053	1/1	0.80	0.14	74,74,74,74	0
54	MG	2a	3135	1/1	0.80	0.16	71,71,71,71	0
54	MG	2A	3171	1/1	0.80	0.23	56,56,56,56	0
54	MG	1A	3987	1/1	0.80	0.34	58,58,58,58	0
54	MG	1A	3845	1/1	0.80	0.17	40,40,40,40	0
54	MG	2a	3162	1/1	0.80	0.23	74,74,74,74	0
54	MG	2A	3366	1/1	0.80	0.10	83,83,83,83	0
54	MG	1A	3919	1/1	0.80	0.11	72,72,72,72	0
54	MG	1A	3747	1/1	0.80	0.06	80,80,80,80	0
54	MG	2A	3371	1/1	0.80	0.08	48,48,48,48	0
54	MG	1A	3178	1/1	0.80	0.21	57,57,57,57	0
57	MPD	2B	219	8/8	0.80	0.23	72,74,84,90	0
58	ARG	1F	319	12/12	0.80	0.21	61,72,79,80	0
54	MG	2A	3067	1/1	0.80	0.69	57,57,57,57	0
54	MG	1A	3506	1/1	0.80	0.23	52,52,52,52	0
54	MG	1A	3261	1/1	0.81	0.15	69,69,69,69	0
54	MG	2A	3256	1/1	0.81	0.33	56,56,56,56	0
54	MG	2a	3008	1/1	0.81	0.18	62,62,62,62	0
54	MG	2A	3117	1/1	0.81	0.14	63,63,63,63	0
54	MG	1A	4002	1/1	0.81	0.09	52,52,52,52	0
54	MG	1a	1777	1/1	0.81	0.08	82,82,82,82	0
54	MG	1A	3720	1/1	0.81	0.12	56,56,56,56	0
54	MG	2A	3284	1/1	0.81	0.27	64,64,64,64	0
54	MG	2A	3285	1/1	0.81	0.23	61,61,61,61	0
54	MG	1a	1782	1/1	0.81	0.07	79,79,79,79	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	2A	3018	1/1	0.81	1.12	55,55,55,55	0
54	MG	2A	3019	1/1	0.81	1.28	58,58,58,58	0
54	MG	2A	3596	1/1	0.81	0.10	73,73,73,73	0
54	MG	1T	203	1/1	0.81	0.19	65,65,65,65	0
54	MG	1A	3799	1/1	0.81	0.23	55,55,55,55	0
54	MG	10	108	1/1	0.81	0.17	69,69,69,69	0
54	MG	1A	3480	1/1	0.81	0.17	61,61,61,61	0
54	MG	2A	3612	1/1	0.81	0.16	51,51,51,51	0
54	MG	2A	3040	1/1	0.81	0.16	59,59,59,59	0
54	MG	1A	3278	1/1	0.81	0.46	75,75,75,75	0
54	MG	2A	3045	1/1	0.81	0.25	76,76,76,76	0
54	MG	1A	3622	1/1	0.81	0.09	57,57,57,57	0
54	MG	1A	3951	1/1	0.81	0.07	70,70,70,70	0
54	MG	2A	3394	1/1	0.81	0.11	72,72,72,72	0
54	MG	1A	3860	1/1	0.81	0.32	60,60,60,60	0
54	MG	2a	3065	1/1	0.81	0.13	80,80,80,80	0
54	MG	1A	3861	1/1	0.81	0.26	68,68,68,68	0
54	MG	2A	3426	1/1	0.81	0.21	58,58,58,58	0
54	MG	1A	3808	1/1	0.81	0.09	64,64,64,64	0
54	MG	2A	3442	1/1	0.81	0.08	73,73,73,73	0
54	MG	2A	3445	1/1	0.81	0.57	76,76,76,76	0
54	MG	1a	1845	1/1	0.81	0.13	70,70,70,70	0
54	MG	1A	3419	1/1	0.81	0.25	37,37,37,37	0
54	MG	1A	3301	1/1	0.81	0.17	66,66,66,66	0
54	MG	2A	3685	1/1	0.81	0.12	74,74,74,74	0
54	MG	2a	3095	1/1	0.81	0.20	79,79,79,79	0
54	MG	2A	3065	1/1	0.81	0.14	51,51,51,51	0
54	MG	2A	3195	1/1	0.81	0.29	65,65,65,65	0
54	MG	1B	225	1/1	0.81	0.20	52,52,52,52	0
54	MG	1a	1634	1/1	0.81	0.10	56,56,56,56	0
54	MG	1A	3302	1/1	0.81	0.15	50,50,50,50	0
54	MG	1a	1870	1/1	0.81	0.13	75,75,75,75	0
54	MG	1a	1872	1/1	0.81	0.18	58,58,58,58	0
54	MG	2A	3499	1/1	0.81	0.08	69,69,69,69	0
54	MG	2A	3211	1/1	0.81	0.33	76,76,76,76	0
54	MG	1A	3886	1/1	0.81	0.25	52,52,52,52	0
54	MG	1A	3283	1/1	0.81	0.23	56,56,56,56	0
54	MG	2D	311	1/1	0.81	0.15	36,36,36,36	0
54	MG	2A	3221	1/1	0.81	0.42	67,67,67,67	0
54	MG	2E	306	1/1	0.81	0.30	79,79,79,79	0
54	MG	1F	316	1/1	0.81	0.47	56,56,56,56	0
54	MG	2A	3093	1/1	0.81	0.15	82,82,82,82	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	1a	1653	1/1	0.81	0.14	48,48,48,48	0
54	MG	2a	3185	1/1	0.81	0.13	83,83,83,83	0
54	MG	1A	3198	1/1	0.81	0.17	55,55,55,55	0
54	MG	2U	201	1/1	0.81	0.32	79,79,79,79	0
54	MG	1A	3826	1/1	0.81	0.19	65,65,65,65	0
57	MPD	2A	3733	8/8	0.81	0.37	54,60,66,66	0
54	MG	2A	3248	1/1	0.81	0.18	63,63,63,63	0
54	MG	1A	3611	1/1	0.81	0.13	60,60,60,60	0
54	MG	2a	3004	1/1	0.81	0.11	56,56,56,56	0
54	MG	1N	202	1/1	0.81	0.21	66,66,66,66	0
54	MG	1A	3282	1/1	0.82	0.24	60,60,60,60	0
54	MG	1A	3890	1/1	0.82	0.14	71,71,71,71	0
54	MG	2A	3479	1/1	0.82	0.11	69,69,69,69	0
54	MG	2A	3483	1/1	0.82	0.06	75,75,75,75	0
54	MG	2a	3039	1/1	0.82	0.30	68,68,68,68	0
54	MG	1B	222	1/1	0.82	0.15	61,61,61,61	0
54	MG	1a	1812	1/1	0.82	0.09	78,78,78,78	0
54	MG	2A	3266	1/1	0.82	0.20	82,82,82,82	0
54	MG	2A	3661	1/1	0.82	0.19	48,48,48,48	0
54	MG	1A	3819	1/1	0.82	0.13	49,49,49,49	0
54	MG	2A	3078	1/1	0.82	0.16	60,60,60,60	0
54	MG	2A	3678	1/1	0.82	0.20	73,73,73,73	0
54	MG	2A	3274	1/1	0.82	0.15	60,60,60,60	0
54	MG	2A	3700	1/1	0.82	0.06	64,64,64,64	0
54	MG	1A	3581	1/1	0.82	0.21	62,62,62,62	0
54	MG	2a	3063	1/1	0.82	0.17	75,75,75,75	0
54	MG	1a	1821	1/1	0.82	0.12	86,86,86,86	0
54	MG	1A	3593	1/1	0.82	0.33	57,57,57,57	0
54	MG	1A	3970	1/1	0.82	0.26	60,60,60,60	0
54	MG	2A	3190	1/1	0.82	0.16	55,55,55,55	0
54	MG	2A	3537	1/1	0.82	0.10	79,79,79,79	0
54	MG	2A	3191	1/1	0.82	0.23	76,76,76,76	0
54	MG	2a	3082	1/1	0.82	0.30	68,68,68,68	0
54	MG	1F	315	1/1	0.82	0.30	72,72,72,72	0
54	MG	2A	3193	1/1	0.82	0.17	67,67,67,67	0
54	MG	2B	214	1/1	0.82	0.31	95,95,95,95	0
54	MG	1a	1602	1/1	0.82	0.12	77,77,77,77	0
54	MG	2A	3357	1/1	0.82	0.14	43,43,43,43	0
54	MG	1A	3699	1/1	0.82	0.12	71,71,71,71	0
54	MG	2A	3560	1/1	0.82	0.10	45,45,45,45	0
54	MG	1A	3511	1/1	0.82	0.21	71,71,71,71	0
54	MG	1A	3623	1/1	0.82	0.20	47,47,47,47	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
54	MG	2A	3105	1/1	0.82	0.18	73,73,73,73	0
54	MG	1a	1673	1/1	0.82	0.17	71,71,71,71	0
54	MG	2P	201	1/1	0.82	0.17	71,71,71,71	0
54	MG	2a	3118	1/1	0.82	0.15	82,82,82,82	0
54	MG	2A	3374	1/1	0.82	0.12	82,82,82,82	0
54	MG	2A	3041	1/1	0.82	0.16	54,54,54,54	0
54	MG	2a	3130	1/1	0.82	0.11	64,64,64,64	0
54	MG	1a	1674	1/1	0.82	0.12	75,75,75,75	0
54	MG	1A	3786	1/1	0.82	0.14	36,36,36,36	0
54	MG	27	101	1/1	0.82	0.95	62,62,62,62	0
54	MG	2A	3403	1/1	0.82	0.26	57,57,57,57	0
54	MG	28	102	1/1	0.82	0.18	66,66,66,66	0
54	MG	1a	1868	1/1	0.82	0.17	80,80,80,80	0
54	MG	1A	4032	1/1	0.82	0.19	65,65,65,65	0
54	MG	1a	1679	1/1	0.82	0.21	66,66,66,66	0
54	MG	2a	3172	1/1	0.82	0.12	76,76,76,76	0
54	MG	1a	1776	1/1	0.82	0.10	79,79,79,79	0
54	MG	2a	3184	1/1	0.82	0.18	73,73,73,73	0
54	MG	2A	3054	1/1	0.82	0.17	72,72,72,72	0
54	MG	2A	3235	1/1	0.82	0.12	75,75,75,75	0
54	MG	2A	3449	1/1	0.82	0.30	47,47,47,47	0
54	MG	1A	3704	1/1	0.82	0.11	62,62,62,62	0
54	MG	2A	3243	1/1	0.82	0.28	62,62,62,62	0
57	MPD	2A	3734	8/8	0.82	0.35	72,77,82,83	0
54	MG	1A	3995	1/1	0.82	0.16	65,65,65,65	0
54	MG	1A	3947	1/1	0.82	0.23	64,64,64,64	0
54	MG	2a	3025	1/1	0.82	0.19	70,70,70,70	0
54	MG	1a	1641	1/1	0.82	0.16	79,79,79,79	0
54	MG	2A	3337	1/1	0.83	0.13	53,53,53,53	0
54	MG	2A	3584	1/1	0.83	0.11	54,54,54,54	0
54	MG	2A	3339	1/1	0.83	0.14	52,52,52,52	0
54	MG	1A	3927	1/1	0.83	0.22	32,32,32,32	0
54	MG	1A	3515	1/1	0.83	0.09	74,74,74,74	0
54	MG	1A	3518	1/1	0.83	0.17	40,40,40,40	0
54	MG	17	105	1/1	0.83	0.34	65,65,65,65	0
54	MG	1A	3855	1/1	0.83	0.13	46,46,46,46	0
54	MG	1A	4022	1/1	0.83	0.16	64,64,64,64	0
54	MG	1A	4024	1/1	0.83	0.08	69,69,69,69	0
54	MG	1A	3527	1/1	0.83	0.17	54,54,54,54	0
54	MG	1A	3950	1/1	0.83	0.17	65,65,65,65	0
54	MG	2A	3073	1/1	0.83	0.38	53,53,53,53	0
54	MG	1A	3679	1/1	0.83	0.08	63,63,63,63	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	1A	3684	1/1	0.83	0.14	64,64,64,64	0
54	MG	2A	3631	1/1	0.83	0.74	64,64,64,64	0
54	MG	2A	3419	1/1	0.83	0.20	75,75,75,75	0
54	MG	1A	3737	1/1	0.83	0.21	35,35,35,35	0
54	MG	1A	3959	1/1	0.83	0.15	49,49,49,49	0
54	MG	1B	214	1/1	0.83	0.21	46,46,46,46	0
54	MG	1a	1638	1/1	0.83	0.16	71,71,71,71	0
54	MG	1A	3963	1/1	0.83	0.12	70,70,70,70	0
54	MG	1A	3869	1/1	0.83	0.16	55,55,55,55	0
54	MG	2A	3220	1/1	0.83	0.11	57,57,57,57	0
54	MG	1A	3813	1/1	0.83	0.23	75,75,75,75	0
54	MG	2A	3098	1/1	0.83	0.06	73,73,73,73	0
54	MG	2A	3657	1/1	0.83	0.12	61,61,61,61	0
54	MG	2A	3659	1/1	0.83	0.14	48,48,48,48	0
54	MG	1h	202	1/1	0.83	0.21	67,67,67,67	0
54	MG	1A	3687	1/1	0.83	0.22	33,33,33,33	0
54	MG	2A	3667	1/1	0.83	0.22	77,77,77,77	0
54	MG	2A	3232	1/1	0.83	0.28	63,63,63,63	0
54	MG	2A	3675	1/1	0.83	0.15	49,49,49,49	0
54	MG	2A	3476	1/1	0.83	0.13	69,69,69,69	0
54	MG	1A	3975	1/1	0.83	0.21	68,68,68,68	0
54	MG	2a	3089	1/1	0.83	0.18	62,62,62,62	0
54	MG	1A	3130	1/1	0.83	0.22	64,64,64,64	0
54	MG	1A	3690	1/1	0.83	0.32	41,41,41,41	0
54	MG	2A	3114	1/1	0.83	0.19	70,70,70,70	0
54	MG	2A	3723	1/1	0.83	0.18	85,85,85,85	0
54	MG	2A	3247	1/1	0.83	0.24	81,81,81,81	0
54	MG	1A	3986	1/1	0.83	0.23	59,59,59,59	0
54	MG	1A	3643	1/1	0.83	0.07	50,50,50,50	0
54	MG	2a	3110	1/1	0.83	0.18	74,74,74,74	0
54	MG	2a	3115	1/1	0.83	0.36	68,68,68,68	0
54	MG	2A	3506	1/1	0.83	0.07	82,82,82,82	0
54	MG	2A	3517	1/1	0.83	0.08	81,81,81,81	0
54	MG	2A	3518	1/1	0.83	0.19	71,71,71,71	0
54	MG	2A	3520	1/1	0.83	0.11	76,76,76,76	0
54	MG	1G	201	1/1	0.83	0.18	66,66,66,66	0
54	MG	2A	3124	1/1	0.83	0.12	46,46,46,46	0
54	MG	2A	3523	1/1	0.83	0.16	71,71,71,71	0
54	MG	1A	3893	1/1	0.83	0.28	39,39,39,39	0
54	MG	1A	3093	1/1	0.83	0.15	52,52,52,52	0
54	MG	1a	1802	1/1	0.83	0.11	75,75,75,75	0
54	MG	2a	3149	1/1	0.83	0.18	71,71,71,71	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	2A	3269	1/1	0.83	0.48	60,60,60,60	0
54	MG	2A	3533	1/1	0.83	0.10	73,73,73,73	0
54	MG	1A	3012	1/1	0.83	0.16	55,55,55,55	0
54	MG	2A	3037	1/1	0.83	0.12	74,74,74,74	0
54	MG	2A	3039	1/1	0.83	0.22	77,77,77,77	0
54	MG	1A	3702	1/1	0.83	0.15	85,85,85,85	0
54	MG	2A	3552	1/1	0.83	0.10	88,88,88,88	0
54	MG	1A	3312	1/1	0.83	0.68	60,60,60,60	0
54	MG	2A	3166	1/1	0.83	0.14	68,68,68,68	0
54	MG	1A	3920	1/1	0.83	0.07	64,64,64,64	0
54	MG	1T	201	1/1	0.83	0.24	62,62,62,62	0
54	MG	1A	3033	1/1	0.83	0.35	55,55,55,55	0
54	MG	1A	3439	1/1	0.83	0.20	48,48,48,48	0
54	MG	2A	3320	1/1	0.83	0.12	71,71,71,71	0
54	MG	1a	1829	1/1	0.83	0.15	83,83,83,83	0
54	MG	1A	4009	1/1	0.83	0.14	84,84,84,84	0
54	MG	2A	3463	1/1	0.84	0.16	59,59,59,59	0
54	MG	1a	1607	1/1	0.84	0.29	69,69,69,69	0
54	MG	1a	1867	1/1	0.84	0.07	89,89,89,89	0
54	MG	2A	3597	1/1	0.84	0.12	72,72,72,72	0
54	MG	2A	3599	1/1	0.84	0.11	75,75,75,75	0
54	MG	2A	3470	1/1	0.84	0.15	74,74,74,74	0
54	MG	2a	3073	1/1	0.84	0.27	82,82,82,82	0
54	MG	1a	1610	1/1	0.84	0.12	73,73,73,73	0
54	MG	1a	1869	1/1	0.84	0.12	85,85,85,85	0
54	MG	1A	3701	1/1	0.84	0.29	62,62,62,62	0
54	MG	1a	1779	1/1	0.84	0.14	79,79,79,79	0
54	MG	2A	3116	1/1	0.84	0.18	56,56,56,56	0
54	MG	1a	1876	1/1	0.84	0.13	62,62,62,62	0
54	MG	1A	3968	1/1	0.84	0.12	61,61,61,61	0
54	MG	1A	3574	1/1	0.84	0.31	73,73,73,73	0
54	MG	1A	3903	1/1	0.84	0.12	45,45,45,45	0
54	MG	2A	3327	1/1	0.84	0.18	70,70,70,70	0
54	MG	2A	3212	1/1	0.84	0.13	62,62,62,62	0
54	MG	2a	3003	1/1	0.84	0.16	71,71,71,71	0
54	MG	2a	3103	1/1	0.84	0.26	65,65,65,65	0
54	MG	1A	3385	1/1	0.84	0.24	50,50,50,50	0
54	MG	1A	3311	1/1	0.84	0.28	74,74,74,74	0
54	MG	1A	3281	1/1	0.84	0.25	64,64,64,64	0
54	MG	2A	3643	1/1	0.84	0.15	45,45,45,45	0
54	MG	1A	3498	1/1	0.84	0.24	60,60,60,60	0
54	MG	1a	1643	1/1	0.84	0.19	61,61,61,61	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	2A	3144	1/1	0.84	0.19	60,60,60,60	0
54	MG	2A	3154	1/1	0.84	0.15	64,64,64,64	0
54	MG	1A	3621	1/1	0.84	0.24	69,69,69,69	0
54	MG	2A	3233	1/1	0.84	0.20	60,60,60,60	0
54	MG	2A	3378	1/1	0.84	0.11	84,84,84,84	0
54	MG	2a	3136	1/1	0.84	0.10	76,76,76,76	0
54	MG	1A	3857	1/1	0.84	0.13	42,42,42,42	0
54	MG	1A	3504	1/1	0.84	0.22	33,33,33,33	0
54	MG	2A	3069	1/1	0.84	0.27	72,72,72,72	0
54	MG	1A	3291	1/1	0.84	0.15	58,58,58,58	0
54	MG	1A	3469	1/1	0.84	0.16	48,48,48,48	0
54	MG	2A	3012	1/1	0.84	0.20	68,68,68,68	0
54	MG	1A	3636	1/1	0.84	0.18	44,44,44,44	0
54	MG	2A	3436	1/1	0.84	0.09	76,76,76,76	0
54	MG	1A	3557	1/1	0.84	0.17	40,40,40,40	0
54	MG	1A	3022	1/1	0.84	0.13	47,47,47,47	0
54	MG	1A	3696	1/1	0.84	0.12	51,51,51,51	0
54	MG	2f	201	1/1	0.84	0.14	57,57,57,57	0
54	MG	2a	3054	1/1	0.84	0.21	72,72,72,72	0
54	MG	2A	3260	1/1	0.84	0.22	73,73,73,73	0
54	MG	1D	315	1/1	0.84	0.15	68,68,68,68	0
54	MG	1A	3445	1/1	0.84	0.09	80,80,80,80	0
54	MG	2B	205	1/1	0.84	0.21	71,71,71,71	0
54	MG	2A	3268	1/1	0.84	0.53	60,60,60,60	0
54	MG	1A	3566	1/1	0.84	0.15	44,44,44,44	0
54	MG	1A	3650	1/1	0.84	0.23	31,31,31,31	0
54	MG	2A	3653	1/1	0.85	0.25	94,94,94,94	0
54	MG	1A	3729	1/1	0.85	0.33	64,64,64,64	0
54	MG	2A	3655	1/1	0.85	0.08	69,69,69,69	0
54	MG	2A	3505	1/1	0.85	0.10	78,78,78,78	0
54	MG	2a	3051	1/1	0.85	0.30	67,67,67,67	0
54	MG	1a	1711	1/1	0.85	0.10	69,69,69,69	0
54	MG	2A	3283	1/1	0.85	0.27	73,73,73,73	0
54	MG	1A	3879	1/1	0.85	0.13	50,50,50,50	0
54	MG	2A	3519	1/1	0.85	0.10	85,85,85,85	0
54	MG	1A	3228	1/1	0.85	0.74	66,66,66,66	0
54	MG	1A	3887	1/1	0.85	0.11	71,71,71,71	0
54	MG	2A	3287	1/1	0.85	0.28	64,64,64,64	0
54	MG	1a	1874	1/1	0.85	0.10	86,86,86,86	0
54	MG	2A	3524	1/1	0.85	0.49	69,69,69,69	0
54	MG	1A	3685	1/1	0.85	0.21	24,24,24,24	0
54	MG	1a	1766	1/1	0.85	0.13	70,70,70,70	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	1A	3401	1/1	0.85	0.08	64,64,64,64	0
54	MG	1A	3008	1/1	0.85	0.14	46,46,46,46	0
54	MG	11	104	1/1	0.85	0.24	63,63,63,63	0
54	MG	2A	3077	1/1	0.85	0.37	74,74,74,74	0
54	MG	1A	3974	1/1	0.85	0.19	59,59,59,59	0
54	MG	1A	3126	1/1	0.85	0.17	40,40,40,40	0
54	MG	2A	3543	1/1	0.85	0.12	74,74,74,74	0
54	MG	2A	3346	1/1	0.85	0.23	45,45,45,45	0
54	MG	2A	3353	1/1	0.85	0.15	42,42,42,42	0
54	MG	1A	3902	1/1	0.85	0.06	67,67,67,67	0
54	MG	2A	3198	1/1	0.85	0.35	75,75,75,75	0
54	MG	1A	3433	1/1	0.85	0.19	26,26,26,26	0
54	MG	1A	3315	1/1	0.85	0.68	38,38,38,38	0
54	MG	2D	309	1/1	0.85	0.37	88,88,88,88	0
54	MG	1A	3757	1/1	0.85	0.09	61,61,61,61	0
54	MG	1A	3047	1/1	0.85	0.34	61,61,61,61	0
54	MG	2A	3209	1/1	0.85	0.38	60,60,60,60	0
54	MG	2A	3003	1/1	0.85	0.12	66,66,66,66	0
54	MG	1A	3610	1/1	0.85	0.25	36,36,36,36	0
54	MG	2A	3008	1/1	0.85	0.18	51,51,51,51	0
54	MG	1A	3662	1/1	0.85	0.17	66,66,66,66	0
54	MG	1A	3295	1/1	0.85	0.13	49,49,49,49	0
54	MG	2a	3121	1/1	0.85	0.12	81,81,81,81	0
54	MG	1A	3109	1/1	0.85	0.21	38,38,38,38	0
54	MG	1a	1817	1/1	0.85	0.08	75,75,75,75	0
54	MG	21	101	1/1	0.85	0.20	59,59,59,59	0
54	MG	1a	1617	1/1	0.85	0.10	70,70,70,70	0
54	MG	2A	3229	1/1	0.85	0.09	77,77,77,77	0
54	MG	1A	3064	1/1	0.85	0.14	44,44,44,44	0
54	MG	1a	1686	1/1	0.85	0.09	82,82,82,82	0
54	MG	1a	1627	1/1	0.85	0.15	77,77,77,77	0
54	MG	1A	3708	1/1	0.85	0.15	59,59,59,59	0
54	MG	2A	3033	1/1	0.85	0.19	57,57,57,57	0
54	MG	2a	3151	1/1	0.85	0.22	80,80,80,80	0
54	MG	2A	3034	1/1	0.85	0.29	81,81,81,81	0
54	MG	2A	3036	1/1	0.85	0.28	66,66,66,66	0
54	MG	1A	3191	1/1	0.85	0.17	58,58,58,58	0
54	MG	2A	3618	1/1	0.85	0.23	48,48,48,48	0
54	MG	1A	3217	1/1	0.85	0.27	52,52,52,52	0
54	MG	1a	1835	1/1	0.85	0.19	78,78,78,78	0
54	MG	1a	1840	1/1	0.85	0.10	73,73,73,73	0
54	MG	2A	3148	1/1	0.85	0.23	54,54,54,54	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
54	MG	2A	3152	1/1	0.85	0.11	48,48,48,48	0
54	MG	1a	1636	1/1	0.85	0.26	66,66,66,66	0
54	MG	1A	3167	1/1	0.85	0.13	77,77,77,77	0
54	MG	1A	3538	1/1	0.85	0.18	42,42,42,42	0
54	MG	1P	203	1/1	0.85	0.25	74,74,74,74	0
54	MG	2a	3031	1/1	0.85	0.14	75,75,75,75	0
54	MG	1a	1703	1/1	0.85	0.10	80,80,80,80	0
54	MG	1A	3724	1/1	0.85	0.32	52,52,52,52	0
54	MG	1a	1706	1/1	0.85	0.45	71,71,71,71	0
54	MG	1A	4038	1/1	0.86	0.28	57,57,57,57	0
54	MG	1A	3815	1/1	0.86	0.06	79,79,79,79	0
54	MG	2a	3036	1/1	0.86	0.21	78,78,78,78	0
54	MG	1A	3784	1/1	0.86	0.27	58,58,58,58	0
54	MG	2A	3461	1/1	0.86	0.13	75,75,75,75	0
54	MG	2A	3140	1/1	0.86	0.18	80,80,80,80	0
54	MG	1A	3216	1/1	0.86	0.34	53,53,53,53	0
54	MG	1a	1699	1/1	0.86	0.27	57,57,57,57	0
54	MG	2A	3645	1/1	0.86	0.07	70,70,70,70	0
54	MG	2A	3147	1/1	0.86	0.15	67,67,67,67	0
54	MG	1a	1702	1/1	0.86	0.18	61,61,61,61	0
54	MG	1a	1646	1/1	0.86	0.10	76,76,76,76	0
54	MG	1W	201	1/1	0.86	0.37	57,57,57,57	0
54	MG	1a	1651	1/1	0.86	0.24	67,67,67,67	0
54	MG	2A	3049	1/1	0.86	0.21	82,82,82,82	0
54	MG	2A	3161	1/1	0.86	0.61	71,71,71,71	0
54	MG	1a	1707	1/1	0.86	0.31	60,60,60,60	0
54	MG	1a	1863	1/1	0.86	0.14	78,78,78,78	0
54	MG	2A	3500	1/1	0.86	0.18	85,85,85,85	0
54	MG	2A	3271	1/1	0.86	0.19	63,63,63,63	0
54	MG	10	106	1/1	0.86	0.24	69,69,69,69	0
54	MG	10	107	1/1	0.86	0.17	70,70,70,70	0
54	MG	2A	3511	1/1	0.86	0.13	77,77,77,77	0
54	MG	1B	210	1/1	0.86	0.27	70,70,70,70	0
54	MG	2A	3697	1/1	0.86	0.16	62,62,62,62	0
54	MG	1A	3002	1/1	0.86	0.14	49,49,49,49	0
54	MG	1A	3605	1/1	0.86	0.42	46,46,46,46	0
54	MG	1a	1744	1/1	0.86	0.28	78,78,78,78	0
54	MG	1a	1659	1/1	0.86	0.20	79,79,79,79	0
54	MG	2A	3180	1/1	0.86	0.12	76,76,76,76	0
54	MG	2A	3181	1/1	0.86	0.11	76,76,76,76	0
54	MG	1a	1760	1/1	0.86	0.14	64,64,64,64	0
54	MG	1a	1765	1/1	0.86	0.22	57,57,57,57	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	1A	3254	1/1	0.86	0.15	55,55,55,55	0
54	MG	2B	208	1/1	0.86	0.18	71,71,71,71	0
54	MG	1A	4005	1/1	0.86	0.25	47,47,47,47	0
54	MG	1A	3470	1/1	0.86	0.12	77,77,77,77	0
54	MG	1a	1773	1/1	0.86	0.14	83,83,83,83	0
54	MG	1D	301	1/1	0.86	0.32	50,50,50,50	0
54	MG	1A	3447	1/1	0.86	0.26	36,36,36,36	0
54	MG	2A	3341	1/1	0.86	0.18	45,45,45,45	0
54	MG	1a	1601	1/1	0.86	0.21	78,78,78,78	0
54	MG	2A	3349	1/1	0.86	0.16	67,67,67,67	0
54	MG	2A	3352	1/1	0.86	0.19	55,55,55,55	0
54	MG	2A	3081	1/1	0.86	0.16	68,68,68,68	0
54	MG	1A	3877	1/1	0.86	0.20	56,56,56,56	0
54	MG	1D	318	1/1	0.86	0.22	52,52,52,52	0
54	MG	2A	3202	1/1	0.86	0.19	53,53,53,53	0
54	MG	1n	102	1/1	0.86	0.10	61,61,61,61	0
54	MG	1A	4012	1/1	0.86	0.09	88,88,88,88	0
54	MG	2A	3370	1/1	0.86	0.15	49,49,49,49	0
54	MG	1A	3694	1/1	0.86	0.14	52,52,52,52	0
54	MG	2A	3208	1/1	0.86	0.24	68,68,68,68	0
54	MG	1A	3936	1/1	0.86	0.06	63,63,63,63	0
54	MG	2a	3144	1/1	0.86	0.11	67,67,67,67	0
54	MG	1a	1793	1/1	0.86	0.17	74,74,74,74	0
54	MG	2a	3150	1/1	0.86	0.15	73,73,73,73	0
54	MG	2A	3389	1/1	0.86	0.21	49,49,49,49	0
54	MG	1A	4015	1/1	0.86	0.31	36,36,36,36	0
54	MG	2A	3396	1/1	0.86	0.14	67,67,67,67	0
54	MG	1A	3260	1/1	0.86	0.18	59,59,59,59	0
54	MG	2A	3402	1/1	0.86	0.15	51,51,51,51	0
54	MG	2A	3016	1/1	0.86	0.22	77,77,77,77	0
54	MG	2a	3181	1/1	0.86	0.14	82,82,82,82	0
54	MG	2A	3404	1/1	0.86	0.20	54,54,54,54	0
54	MG	1A	3980	1/1	0.86	0.24	52,52,52,52	0
54	MG	1a	1625	1/1	0.86	0.15	64,64,64,64	0
54	MG	2a	3015	1/1	0.86	0.09	74,74,74,74	0
54	MG	1A	3639	1/1	0.86	0.40	64,64,64,64	0
54	MG	2A	3022	1/1	0.86	1.51	63,63,63,63	0
57	MPD	1A	4043	8/8	0.86	0.21	56,63,69,69	0
57	MPD	1a	1880	8/8	0.86	0.19	60,72,78,78	0
54	MG	2A	3440	1/1	0.86	0.13	59,59,59,59	0
54	MG	1A	3850	1/1	0.86	0.13	60,60,60,60	0
54	MG	1A	3571	1/1	0.86	0.15	52,52,52,52	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	1a	1689	1/1	0.86	0.12	68,68,68,68	0
54	MG	1A	3300	1/1	0.86	0.28	52,52,52,52	0
54	MG	1A	4036	1/1	0.86	0.18	73,73,73,73	0
54	MG	2a	3033	1/1	0.87	0.23	70,70,70,70	0
54	MG	1A	3880	1/1	0.87	0.07	63,63,63,63	0
54	MG	1a	1768	1/1	0.87	0.08	77,77,77,77	0
54	MG	1a	1875	1/1	0.87	0.26	70,70,70,70	0
54	MG	1A	3778	1/1	0.87	0.14	55,55,55,55	0
54	MG	2a	3043	1/1	0.87	0.07	85,85,85,85	0
54	MG	2A	3481	1/1	0.87	0.27	73,73,73,73	0
54	MG	1A	3211	1/1	0.87	0.30	70,70,70,70	0
54	MG	1A	3952	1/1	0.87	0.26	47,47,47,47	0
54	MG	1A	3058	1/1	0.87	0.29	58,58,58,58	0
54	MG	1A	3199	1/1	0.87	0.15	55,55,55,55	0
54	MG	2A	3291	1/1	0.87	0.20	78,78,78,78	0
54	MG	1a	1614	1/1	0.87	0.14	67,67,67,67	0
54	MG	2A	3297	1/1	0.87	0.13	65,65,65,65	0
54	MG	1A	3079	1/1	0.87	0.35	45,45,45,45	0
54	MG	1a	1622	1/1	0.87	0.08	55,55,55,55	0
54	MG	2A	3513	1/1	0.87	0.13	65,65,65,65	0
54	MG	1A	3412	1/1	0.87	0.17	38,38,38,38	0
54	MG	1h	201	1/1	0.87	0.22	59,59,59,59	0
54	MG	2A	3323	1/1	0.87	0.21	67,67,67,67	0
54	MG	2A	3689	1/1	0.87	0.12	73,73,73,73	0
54	MG	1A	3899	1/1	0.87	0.20	75,75,75,75	0
54	MG	1A	3901	1/1	0.87	0.18	33,33,33,33	0
54	MG	2A	3706	1/1	0.87	0.11	88,88,88,88	0
54	MG	2A	3082	1/1	0.87	0.10	65,65,65,65	0
54	MG	1l	201	1/1	0.87	0.30	71,71,71,71	0
54	MG	2a	3079	1/1	0.87	0.10	83,83,83,83	0
54	MG	1m	202	1/1	0.87	0.18	79,79,79,79	0
54	MG	2A	3089	1/1	0.87	0.18	78,78,78,78	0
54	MG	1A	3520	1/1	0.87	0.21	60,60,60,60	0
54	MG	1a	1794	1/1	0.87	0.18	78,78,78,78	0
54	MG	2A	3001	1/1	0.87	0.16	66,66,66,66	0
54	MG	2A	3356	1/1	0.87	0.09	74,74,74,74	0
54	MG	2B	207	1/1	0.87	0.13	76,76,76,76	0
54	MG	1A	3193	1/1	0.87	0.29	77,77,77,77	0
54	MG	2B	209	1/1	0.87	0.19	80,80,80,80	0
54	MG	1A	3229	1/1	0.87	0.40	44,44,44,44	0
54	MG	1A	3437	1/1	0.87	0.23	66,66,66,66	0
54	MG	1A	3039	1/1	0.87	0.22	56,56,56,56	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	2A	3011	1/1	0.87	0.34	47,47,47,47	0
54	MG	2A	3548	1/1	0.87	0.15	44,44,44,44	0
54	MG	2D	307	1/1	0.87	0.54	60,60,60,60	0
54	MG	1A	3977	1/1	0.87	0.12	59,59,59,59	0
54	MG	2A	3215	1/1	0.87	0.15	65,65,65,65	0
54	MG	1A	3545	1/1	0.87	0.33	48,48,48,48	0
54	MG	1A	3745	1/1	0.87	0.16	40,40,40,40	0
54	MG	2A	3382	1/1	0.87	0.13	64,64,64,64	0
54	MG	2a	3125	1/1	0.87	0.16	65,65,65,65	0
54	MG	1A	3094	1/1	0.87	0.28	42,42,42,42	0
54	MG	1A	3249	1/1	0.87	0.28	70,70,70,70	0
54	MG	1B	209	1/1	0.87	0.17	58,58,58,58	0
54	MG	1A	3250	1/1	0.87	0.26	66,66,66,66	0
54	MG	2A	3121	1/1	0.87	0.08	74,74,74,74	0
54	MG	2A	3401	1/1	0.87	0.43	82,82,82,82	0
54	MG	1a	1830	1/1	0.87	0.06	79,79,79,79	0
54	MG	2A	3126	1/1	0.87	0.10	72,72,72,72	0
54	MG	1B	212	1/1	0.87	0.10	55,55,55,55	0
54	MG	1A	3759	1/1	0.87	0.10	51,51,51,51	0
54	MG	1a	1838	1/1	0.87	0.14	73,73,73,73	0
54	MG	1a	1709	1/1	0.87	0.16	73,73,73,73	0
54	MG	2A	3244	1/1	0.87	0.30	56,56,56,56	0
54	MG	1B	215	1/1	0.87	0.14	65,65,65,65	0
54	MG	1B	216	1/1	0.87	0.28	51,51,51,51	0
54	MG	15	106	1/1	0.87	0.36	38,38,38,38	0
54	MG	2a	3173	1/1	0.87	0.14	63,63,63,63	0
54	MG	1B	217	1/1	0.87	0.13	58,58,58,58	0
54	MG	1a	1858	1/1	0.87	0.10	86,86,86,86	0
54	MG	1A	3940	1/1	0.87	0.13	69,69,69,69	0
54	MG	2A	3613	1/1	0.87	0.23	56,56,56,56	0
54	MG	2a	3187	1/1	0.87	0.10	74,74,74,74	0
54	MG	1a	1737	1/1	0.87	0.08	82,82,82,82	0
54	MG	1A	3674	1/1	0.87	0.20	82,82,82,82	0
54	MG	2A	3458	1/1	0.87	0.18	69,69,69,69	0
54	MG	1a	1753	1/1	0.87	0.15	66,66,66,66	0
54	MG	2a	3021	1/1	0.87	0.14	79,79,79,79	0
54	MG	2A	3460	1/1	0.87	0.15	79,79,79,79	0
54	MG	1A	3944	1/1	0.87	0.14	56,56,56,56	0
54	MG	1a	1758	1/1	0.87	0.14	76,76,76,76	0
54	MG	2A	3165	1/1	0.87	0.68	61,61,61,61	0
54	MG	2a	3029	1/1	0.87	0.09	76,76,76,76	0
54	MG	1A	3627	1/1	0.87	0.17	66,66,66,66	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	1a	1668	1/1	0.87	0.47	73,73,73,73	0
54	MG	10	103	1/1	0.88	0.13	52,52,52,52	0
54	MG	2A	3423	1/1	0.88	0.10	47,47,47,47	0
54	MG	1A	3112	1/1	0.88	0.16	67,67,67,67	0
54	MG	2A	3430	1/1	0.88	0.10	83,83,83,83	0
54	MG	2A	3432	1/1	0.88	0.39	54,54,54,54	0
54	MG	2A	3434	1/1	0.88	0.20	63,63,63,63	0
54	MG	1n	101	1/1	0.88	0.29	76,76,76,76	0
54	MG	2A	3437	1/1	0.88	0.25	87,87,87,87	0
54	MG	1A	4029	1/1	0.88	0.31	59,59,59,59	0
54	MG	1A	3152	1/1	0.88	0.19	62,62,62,62	0
54	MG	1A	3868	1/1	0.88	0.12	43,43,43,43	0
54	MG	2A	3443	1/1	0.88	0.19	75,75,75,75	0
54	MG	2a	3040	1/1	0.88	0.21	73,73,73,73	0
54	MG	1A	3108	1/1	0.88	0.52	40,40,40,40	0
54	MG	1a	1675	1/1	0.88	0.22	69,69,69,69	0
54	MG	1A	3870	1/1	0.88	0.19	47,47,47,47	0
54	MG	1a	1791	1/1	0.88	0.06	77,77,77,77	0
54	MG	1A	3220	1/1	0.88	0.41	74,74,74,74	0
54	MG	1A	3383	1/1	0.88	0.15	58,58,58,58	0
54	MG	2A	3651	1/1	0.88	0.13	60,60,60,60	0
54	MG	2a	3055	1/1	0.88	0.34	76,76,76,76	0
54	MG	1A	3706	1/1	0.88	0.12	80,80,80,80	0
54	MG	1a	1798	1/1	0.88	0.25	83,83,83,83	0
54	MG	1A	3878	1/1	0.88	0.16	58,58,58,58	0
54	MG	2A	3131	1/1	0.88	0.17	81,81,81,81	0
54	MG	1a	1803	1/1	0.88	0.23	77,77,77,77	0
54	MG	1a	1682	1/1	0.88	0.38	60,60,60,60	0
54	MG	1A	3659	1/1	0.88	0.21	53,53,53,53	0
54	MG	2A	3660	1/1	0.88	0.21	44,44,44,44	0
54	MG	1a	1813	1/1	0.88	0.12	78,78,78,78	0
54	MG	2A	3026	1/1	0.88	0.46	62,62,62,62	0
54	MG	1A	3010	1/1	0.88	0.27	61,61,61,61	0
54	MG	1A	3464	1/1	0.88	0.12	66,66,66,66	0
54	MG	2A	3151	1/1	0.88	0.12	65,65,65,65	0
54	MG	2A	3482	1/1	0.88	0.20	61,61,61,61	0
54	MG	2a	3078	1/1	0.88	0.07	69,69,69,69	0
54	MG	2A	3679	1/1	0.88	0.12	63,63,63,63	0
54	MG	1A	3128	1/1	0.88	0.33	60,60,60,60	0
54	MG	1A	3888	1/1	0.88	0.09	50,50,50,50	0
54	MG	2A	3691	1/1	0.88	0.11	66,66,66,66	0
54	MG	1A	3721	1/1	0.88	0.34	49,49,49,49	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	2A	3490	1/1	0.88	0.08	71,71,71,71	0
54	MG	1A	3060	1/1	0.88	0.11	58,58,58,58	0
54	MG	1A	3471	1/1	0.88	0.28	71,71,71,71	0
54	MG	1A	3473	1/1	0.88	0.14	63,63,63,63	0
54	MG	1A	3608	1/1	0.88	0.13	44,44,44,44	0
54	MG	1A	3132	1/1	0.88	0.14	40,40,40,40	0
54	MG	1A	3344	1/1	0.88	0.21	59,59,59,59	0
54	MG	2A	3168	1/1	0.88	0.16	53,53,53,53	0
54	MG	2A	3169	1/1	0.88	0.26	67,67,67,67	0
54	MG	1A	3138	1/1	0.88	0.12	59,59,59,59	0
54	MG	2a	3108	1/1	0.88	0.30	71,71,71,71	0
54	MG	2B	206	1/1	0.88	0.11	73,73,73,73	0
54	MG	2A	3309	1/1	0.88	0.10	70,70,70,70	0
54	MG	2A	3316	1/1	0.88	0.13	41,41,41,41	0
54	MG	1A	3285	1/1	0.88	0.13	49,49,49,49	0
54	MG	1a	1842	1/1	0.88	0.16	87,87,87,87	0
54	MG	1E	305	1/1	0.88	0.24	31,31,31,31	0
54	MG	1E	306	1/1	0.88	0.06	50,50,50,50	0
54	MG	1A	3490	1/1	0.88	0.21	57,57,57,57	0
54	MG	2B	217	1/1	0.88	0.12	79,79,79,79	0
54	MG	1A	3918	1/1	0.88	0.16	51,51,51,51	0
54	MG	1A	3144	1/1	0.88	0.16	47,47,47,47	0
54	MG	1A	3188	1/1	0.88	0.12	63,63,63,63	0
54	MG	1A	3756	1/1	0.88	0.13	66,66,66,66	0
54	MG	1a	1642	1/1	0.88	0.13	65,65,65,65	0
54	MG	2a	3138	1/1	0.88	0.16	75,75,75,75	0
54	MG	1A	3367	1/1	0.88	0.20	55,55,55,55	0
54	MG	2A	3540	1/1	0.88	0.20	65,65,65,65	0
54	MG	2a	3148	1/1	0.88	0.22	82,82,82,82	0
54	MG	1a	1723	1/1	0.88	0.11	58,58,58,58	0
54	MG	1A	3849	1/1	0.88	0.18	64,64,64,64	0
54	MG	2A	3355	1/1	0.88	0.23	75,75,75,75	0
54	MG	1a	1735	1/1	0.88	0.15	70,70,70,70	0
54	MG	2A	3071	1/1	0.88	0.41	61,61,61,61	0
54	MG	1A	3931	1/1	0.88	0.28	31,31,31,31	0
54	MG	1a	1739	1/1	0.88	0.16	72,72,72,72	0
54	MG	1a	1648	1/1	0.88	0.16	49,49,49,49	0
54	MG	1a	1748	1/1	0.88	0.11	66,66,66,66	0
54	MG	2a	3180	1/1	0.88	0.12	59,59,59,59	0
54	MG	1O	201	1/1	0.88	0.30	57,57,57,57	0
54	MG	1A	3576	1/1	0.88	0.18	44,44,44,44	0
54	MG	1A	3938	1/1	0.88	0.08	46,46,46,46	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	1A	3762	1/1	0.88	0.12	62,62,62,62	0
54	MG	2A	3084	1/1	0.88	0.42	51,51,51,51	0
54	MG	1a	1764	1/1	0.88	0.24	72,72,72,72	0
54	MG	2A	3210	1/1	0.88	0.16	70,70,70,70	0
54	MG	1A	3578	1/1	0.88	0.38	55,55,55,55	0
54	MG	1A	3444	1/1	0.88	0.17	35,35,35,35	0
57	MPD	1T	206	8/8	0.88	0.23	71,73,77,78	0
54	MG	1A	4021	1/1	0.88	0.16	54,54,54,54	0
54	MG	2A	3400	1/1	0.88	0.12	60,60,60,60	0
54	MG	1A	3774	1/1	0.88	0.13	49,49,49,49	0
54	MG	2A	3217	1/1	0.88	0.14	64,64,64,64	0
54	MG	1A	3507	1/1	0.88	0.21	33,33,33,33	0
54	MG	2A	3096	1/1	0.88	0.14	64,64,64,64	0
54	MG	10	102	1/1	0.88	0.84	46,46,46,46	0
59	ZN	2n	102	1/1	0.88	0.08	108,108,108,108	0
54	MG	1A	3255	1/1	0.89	0.34	53,53,53,53	0
54	MG	1A	4034	1/1	0.89	0.12	79,79,79,79	0
54	MG	2A	3076	1/1	0.89	0.36	60,60,60,60	0
54	MG	1a	1873	1/1	0.89	0.17	64,64,64,64	0
54	MG	1A	3783	1/1	0.89	0.23	66,66,66,66	0
54	MG	1A	3091	1/1	0.89	0.33	42,42,42,42	0
54	MG	1A	3651	1/1	0.89	0.18	69,69,69,69	0
54	MG	2A	3577	1/1	0.89	0.18	64,64,64,64	0
54	MG	1A	3796	1/1	0.89	0.17	57,57,57,57	0
54	MG	2a	3017	1/1	0.89	0.10	57,57,57,57	0
54	MG	1a	1767	1/1	0.89	0.13	80,80,80,80	0
54	MG	1B	205	1/1	0.89	0.15	61,61,61,61	0
54	MG	1A	3654	1/1	0.89	0.19	44,44,44,44	0
54	MG	11	105	1/1	0.89	0.14	47,47,47,47	0
54	MG	1a	1671	1/1	0.89	0.23	64,64,64,64	0
54	MG	2A	3092	1/1	0.89	0.42	61,61,61,61	0
54	MG	1A	3080	1/1	0.89	0.56	53,53,53,53	0
54	MG	1a	1775	1/1	0.89	0.16	76,76,76,76	0
54	MG	1A	3115	1/1	0.89	0.16	55,55,55,55	0
54	MG	1A	3430	1/1	0.89	0.17	61,61,61,61	0
54	MG	1A	3478	1/1	0.89	0.09	66,66,66,66	0
54	MG	2A	3405	1/1	0.89	0.19	57,57,57,57	0
54	MG	2A	3099	1/1	0.89	0.31	65,65,65,65	0
54	MG	2A	3414	1/1	0.89	0.17	66,66,66,66	0
54	MG	2A	3614	1/1	0.89	0.16	61,61,61,61	0
54	MG	1A	3807	1/1	0.89	0.14	60,60,60,60	0
54	MG	1A	3066	1/1	0.89	0.18	72,72,72,72	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	2A	3103	1/1	0.89	0.23	64,64,64,64	0
54	MG	2A	3228	1/1	0.89	0.61	60,60,60,60	0
54	MG	1A	3102	1/1	0.89	0.22	45,45,45,45	0
54	MG	1a	1785	1/1	0.89	0.17	73,73,73,73	0
54	MG	1A	3205	1/1	0.89	0.20	60,60,60,60	0
54	MG	2a	3050	1/1	0.89	0.20	87,87,87,87	0
54	MG	1a	1789	1/1	0.89	0.12	64,64,64,64	0
54	MG	2A	3438	1/1	0.89	0.20	64,64,64,64	0
54	MG	1A	3376	1/1	0.89	0.19	65,65,65,65	0
54	MG	2A	3236	1/1	0.89	0.11	63,63,63,63	0
54	MG	2A	3639	1/1	0.89	0.13	62,62,62,62	0
54	MG	1A	3730	1/1	0.89	0.16	73,73,73,73	0
54	MG	2A	3006	1/1	0.89	0.10	57,57,57,57	0
54	MG	1a	1605	1/1	0.89	0.18	63,63,63,63	0
54	MG	1a	1606	1/1	0.89	0.12	72,72,72,72	0
54	MG	2A	3448	1/1	0.89	0.16	72,72,72,72	0
54	MG	1A	3982	1/1	0.89	0.20	70,70,70,70	0
54	MG	2A	3451	1/1	0.89	0.17	59,59,59,59	0
54	MG	1A	3612	1/1	0.89	0.14	55,55,55,55	0
54	MG	1A	3189	1/1	0.89	0.34	42,42,42,42	0
54	MG	1a	1804	1/1	0.89	0.14	77,77,77,77	0
54	MG	2A	3658	1/1	0.89	0.12	86,86,86,86	0
54	MG	1A	3562	1/1	0.89	0.21	58,58,58,58	0
54	MG	1A	3682	1/1	0.89	0.14	46,46,46,46	0
54	MG	2A	3133	1/1	0.89	0.22	72,72,72,72	0
54	MG	2A	3134	1/1	0.89	0.13	66,66,66,66	0
54	MG	2a	3083	1/1	0.89	0.31	77,77,77,77	0
54	MG	2A	3264	1/1	0.89	0.26	73,73,73,73	0
54	MG	1A	3741	1/1	0.89	0.20	43,43,43,43	0
54	MG	2A	3267	1/1	0.89	0.15	64,64,64,64	0
54	MG	2A	3139	1/1	0.89	0.34	56,56,56,56	0
54	MG	2A	3474	1/1	0.89	0.09	84,84,84,84	0
54	MG	2a	3090	1/1	0.89	0.16	70,70,70,70	0
54	MG	1a	1814	1/1	0.89	0.12	81,81,81,81	0
54	MG	2A	3477	1/1	0.89	0.23	83,83,83,83	0
54	MG	2A	3690	1/1	0.89	0.07	57,57,57,57	0
54	MG	1a	1816	1/1	0.89	0.13	75,75,75,75	0
54	MG	2A	3695	1/1	0.89	0.30	74,74,74,74	0
54	MG	1A	3038	1/1	0.89	0.12	69,69,69,69	0
54	MG	1A	3499	1/1	0.89	0.20	27,27,27,27	0
54	MG	2a	3105	1/1	0.89	0.42	83,83,83,83	0
54	MG	2A	3705	1/1	0.89	0.51	65,65,65,65	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	1A	3448	1/1	0.89	0.19	53,53,53,53	0
54	MG	1A	3449	1/1	0.89	0.28	44,44,44,44	0
54	MG	2A	3708	1/1	0.89	0.13	80,80,80,80	0
54	MG	1a	1632	1/1	0.89	0.12	68,68,68,68	0
54	MG	2A	3714	1/1	0.89	0.15	59,59,59,59	0
54	MG	2a	3119	1/1	0.89	0.07	74,74,74,74	0
54	MG	2A	3716	1/1	0.89	0.14	81,81,81,81	0
54	MG	2A	3717	1/1	0.89	0.16	56,56,56,56	0
54	MG	2A	3720	1/1	0.89	0.12	73,73,73,73	0
54	MG	2A	3722	1/1	0.89	0.18	76,76,76,76	0
54	MG	1A	3338	1/1	0.89	0.20	41,41,41,41	0
54	MG	1A	3340	1/1	0.89	0.16	46,46,46,46	0
54	MG	2A	3491	1/1	0.89	0.12	52,52,52,52	0
54	MG	2A	3728	1/1	0.89	0.25	64,64,64,64	0
54	MG	1A	3695	1/1	0.89	0.21	53,53,53,53	0
54	MG	2B	202	1/1	0.89	0.14	82,82,82,82	0
54	MG	1a	1833	1/1	0.89	0.14	68,68,68,68	0
54	MG	1A	3760	1/1	0.89	0.10	53,53,53,53	0
54	MG	2A	3294	1/1	0.89	0.06	65,65,65,65	0
54	MG	1a	1708	1/1	0.89	0.13	64,64,64,64	0
54	MG	2A	3508	1/1	0.89	0.10	72,72,72,72	0
54	MG	1A	3933	1/1	0.89	0.07	53,53,53,53	0
54	MG	1A	3040	1/1	0.89	0.22	42,42,42,42	0
54	MG	2A	3048	1/1	0.89	0.25	73,73,73,73	0
54	MG	1A	3131	1/1	0.89	0.09	64,64,64,64	0
54	MG	1A	3768	1/1	0.89	0.29	69,69,69,69	0
54	MG	2A	3319	1/1	0.89	0.10	44,44,44,44	0
54	MG	2B	218	1/1	0.89	0.15	79,79,79,79	0
54	MG	1a	1644	1/1	0.89	0.17	59,59,59,59	0
54	MG	1A	3399	1/1	0.89	0.13	49,49,49,49	0
54	MG	2A	3322	1/1	0.89	0.20	78,78,78,78	0
54	MG	2A	3176	1/1	0.89	0.12	62,62,62,62	0
54	MG	1a	1854	1/1	0.89	0.24	74,74,74,74	0
54	MG	2A	3328	1/1	0.89	0.29	72,72,72,72	0
54	MG	1A	3468	1/1	0.89	0.18	27,27,27,27	0
54	MG	1a	1732	1/1	0.89	0.14	78,78,78,78	0
54	MG	2A	3338	1/1	0.89	0.16	41,41,41,41	0
54	MG	1Q	205	1/1	0.89	0.22	62,62,62,62	0
54	MG	2t	201	1/1	0.89	0.19	53,53,53,53	0
54	MG	2y	3200	1/1	0.89	0.07	74,74,74,74	0
54	MG	2A	3340	1/1	0.89	0.20	59,59,59,59	0
54	MG	1A	3863	1/1	0.89	0.11	55,55,55,55	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	1a	1862	1/1	0.89	0.15	82,82,82,82	0
54	MG	2A	3185	1/1	0.89	0.11	71,71,71,71	0
54	MG	1A	3775	1/1	0.89	0.18	51,51,51,51	0
54	MG	1A	3866	1/1	0.89	0.20	64,64,64,64	0
54	MG	1V	204	1/1	0.89	0.27	65,65,65,65	0
54	MG	1a	1749	1/1	0.89	0.26	77,77,77,77	0
54	MG	1A	3525	1/1	0.89	0.15	61,61,61,61	0
54	MG	2a	3001	1/1	0.89	0.30	54,54,54,54	0
54	MG	1d	302	1/1	0.90	0.12	82,82,82,82	0
54	MG	2A	3091	1/1	0.90	0.20	57,57,57,57	0
54	MG	1A	3243	1/1	0.90	0.72	51,51,51,51	0
54	MG	2a	3013	1/1	0.90	0.40	79,79,79,79	0
54	MG	2A	3593	1/1	0.90	0.11	58,58,58,58	0
54	MG	1d	304	1/1	0.90	0.21	71,71,71,71	0
54	MG	1A	3915	1/1	0.90	0.11	57,57,57,57	0
54	MG	2A	3214	1/1	0.90	0.28	60,60,60,60	0
54	MG	1A	3828	1/1	0.90	0.13	79,79,79,79	0
54	MG	1A	4010	1/1	0.90	0.09	57,57,57,57	0
54	MG	2A	3605	1/1	0.90	0.15	51,51,51,51	0
54	MG	2A	3097	1/1	0.90	0.06	77,77,77,77	0
54	MG	1A	3120	1/1	0.90	0.18	51,51,51,51	0
54	MG	1R	202	1/1	0.90	0.45	48,48,48,48	0
54	MG	1A	3830	1/1	0.90	0.12	52,52,52,52	0
54	MG	1A	3523	1/1	0.90	0.20	46,46,46,46	0
54	MG	1A	3835	1/1	0.90	0.16	55,55,55,55	0
54	MG	2A	3420	1/1	0.90	0.18	39,39,39,39	0
54	MG	1U	204	1/1	0.90	0.42	65,65,65,65	0
54	MG	2A	3109	1/1	0.90	0.61	55,55,55,55	0
54	MG	2A	3628	1/1	0.90	0.11	63,63,63,63	0
54	MG	2A	3427	1/1	0.90	0.18	71,71,71,71	0
54	MG	2A	3230	1/1	0.90	0.19	72,72,72,72	0
54	MG	2A	3431	1/1	0.90	0.09	67,67,67,67	0
54	MG	2a	3042	1/1	0.90	0.21	65,65,65,65	0
54	MG	1A	3524	1/1	0.90	0.11	46,46,46,46	0
54	MG	1A	3457	1/1	0.90	0.19	43,43,43,43	0
54	MG	1A	4019	1/1	0.90	0.20	57,57,57,57	0
54	MG	1A	4020	1/1	0.90	0.08	42,42,42,42	0
54	MG	1A	3677	1/1	0.90	0.59	65,65,65,65	0
54	MG	2A	3238	1/1	0.90	0.86	51,51,51,51	0
54	MG	1A	3286	1/1	0.90	0.58	60,60,60,60	0
54	MG	1A	3937	1/1	0.90	0.24	35,35,35,35	0
54	MG	2A	3648	1/1	0.90	0.08	48,48,48,48	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	1A	3105	1/1	0.90	0.32	63,63,63,63	0
54	MG	2A	3122	1/1	0.90	0.11	56,56,56,56	0
54	MG	2A	3123	1/1	0.90	0.24	49,49,49,49	0
54	MG	1A	4028	1/1	0.90	0.15	66,66,66,66	0
54	MG	2A	3125	1/1	0.90	0.07	66,66,66,66	0
54	MG	1A	3536	1/1	0.90	0.20	32,32,32,32	0
54	MG	2A	3251	1/1	0.90	0.49	51,51,51,51	0
54	MG	2A	3127	1/1	0.90	0.44	47,47,47,47	0
54	MG	2A	3128	1/1	0.90	0.41	46,46,46,46	0
54	MG	2A	3257	1/1	0.90	0.17	40,40,40,40	0
54	MG	1A	4030	1/1	0.90	0.14	66,66,66,66	0
54	MG	1A	3190	1/1	0.90	0.34	48,48,48,48	0
54	MG	1A	3466	1/1	0.90	0.11	51,51,51,51	0
54	MG	2a	3072	1/1	0.90	0.10	63,63,63,63	0
54	MG	1A	3688	1/1	0.90	0.13	50,50,50,50	0
54	MG	2a	3074	1/1	0.90	0.30	56,56,56,56	0
54	MG	2a	3076	1/1	0.90	0.32	74,74,74,74	0
54	MG	2A	3464	1/1	0.90	0.12	53,53,53,53	0
54	MG	1A	3945	1/1	0.90	0.18	62,62,62,62	0
54	MG	1A	3027	1/1	0.90	0.41	72,72,72,72	0
54	MG	2A	3469	1/1	0.90	0.12	42,42,42,42	0
54	MG	1A	3390	1/1	0.90	0.21	78,78,78,78	0
54	MG	2A	3473	1/1	0.90	0.17	79,79,79,79	0
54	MG	1B	203	1/1	0.90	0.50	77,77,77,77	0
54	MG	1A	3158	1/1	0.90	0.15	53,53,53,53	0
54	MG	1A	3070	1/1	0.90	0.41	45,45,45,45	0
54	MG	2A	3696	1/1	0.90	0.08	55,55,55,55	0
54	MG	1A	3076	1/1	0.90	0.13	44,44,44,44	0
54	MG	2a	3093	1/1	0.90	0.29	63,63,63,63	0
54	MG	2A	3277	1/1	0.90	0.12	70,70,70,70	0
54	MG	2a	3096	1/1	0.90	0.11	73,73,73,73	0
54	MG	1A	3222	1/1	0.90	0.18	55,55,55,55	0
54	MG	2A	3280	1/1	0.90	0.12	65,65,65,65	0
54	MG	1a	1823	1/1	0.90	0.13	76,76,76,76	0
54	MG	1A	3265	1/1	0.90	0.15	53,53,53,53	0
54	MG	1a	1825	1/1	0.90	0.12	79,79,79,79	0
54	MG	2A	3487	1/1	0.90	0.14	87,87,87,87	0
54	MG	1A	3305	1/1	0.90	0.20	45,45,45,45	0
54	MG	1A	3628	1/1	0.90	0.42	45,45,45,45	0
54	MG	1A	3425	1/1	0.90	0.20	32,32,32,32	0
54	MG	2a	3112	1/1	0.90	0.07	84,84,84,84	0
54	MG	2A	3157	1/1	0.90	0.09	63,63,63,63	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	1a	1831	1/1	0.90	0.10	86,86,86,86	0
54	MG	2A	3502	1/1	0.90	0.14	47,47,47,47	0
54	MG	2A	3503	1/1	0.90	0.15	76,76,76,76	0
54	MG	2A	3727	1/1	0.90	0.10	74,74,74,74	0
54	MG	1A	3792	1/1	0.90	0.23	36,36,36,36	0
54	MG	2A	3729	1/1	0.90	0.17	74,74,74,74	0
54	MG	1A	3567	1/1	0.90	0.17	43,43,43,43	0
54	MG	2A	3299	1/1	0.90	0.17	43,43,43,43	0
54	MG	2A	3308	1/1	0.90	0.13	68,68,68,68	0
54	MG	2A	3046	1/1	0.90	0.23	76,76,76,76	0
54	MG	1A	3270	1/1	0.90	0.24	49,49,49,49	0
54	MG	1A	3272	1/1	0.90	0.20	68,68,68,68	0
54	MG	1A	3707	1/1	0.90	0.13	55,55,55,55	0
54	MG	1A	3883	1/1	0.90	0.08	68,68,68,68	0
54	MG	1a	1628	1/1	0.90	0.23	70,70,70,70	0
54	MG	2a	3141	1/1	0.90	0.14	70,70,70,70	0
54	MG	1a	1843	1/1	0.90	0.10	77,77,77,77	0
54	MG	1B	229	1/1	0.90	0.09	68,68,68,68	0
54	MG	1a	1849	1/1	0.90	0.16	63,63,63,63	0
54	MG	1a	1718	1/1	0.90	0.14	67,67,67,67	0
54	MG	1a	1852	1/1	0.90	0.16	76,76,76,76	0
54	MG	2a	3153	1/1	0.90	0.14	82,82,82,82	0
54	MG	2a	3155	1/1	0.90	0.09	81,81,81,81	0
54	MG	1A	3885	1/1	0.90	0.10	41,41,41,41	0
54	MG	1A	3054	1/1	0.90	0.56	34,34,34,34	0
54	MG	2A	3183	1/1	0.90	0.25	55,55,55,55	0
54	MG	2a	3168	1/1	0.90	0.19	75,75,75,75	0
54	MG	1D	311	1/1	0.90	0.57	57,57,57,57	0
54	MG	1a	1734	1/1	0.90	0.20	46,46,46,46	0
54	MG	2A	3344	1/1	0.90	0.14	46,46,46,46	0
54	MG	2D	313	1/1	0.90	0.21	70,70,70,70	0
54	MG	1A	3644	1/1	0.90	0.23	29,29,29,29	0
54	MG	1D	316	1/1	0.90	0.39	70,70,70,70	0
54	MG	1A	3362	1/1	0.90	0.10	76,76,76,76	0
54	MG	1A	3985	1/1	0.90	0.09	59,59,59,59	0
54	MG	2a	3190	1/1	0.90	0.07	68,68,68,68	0
54	MG	1A	3579	1/1	0.90	0.20	61,61,61,61	0
54	MG	1A	3440	1/1	0.90	0.21	34,34,34,34	0
54	MG	1A	3366	1/1	0.90	0.23	37,37,37,37	0
54	MG	1A	3134	1/1	0.90	0.30	51,51,51,51	0
54	MG	2r	101	1/1	0.90	0.10	80,80,80,80	0
54	MG	2r	102	1/1	0.90	0.11	78,78,78,78	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	1A	3065	1/1	0.90	0.16	41,41,41,41	0
54	MG	1A	3041	1/1	0.90	0.24	61,61,61,61	0
54	MG	25	102	1/1	0.90	0.45	50,50,50,50	0
54	MG	25	103	1/1	0.90	0.32	74,74,74,74	0
54	MG	2A	3200	1/1	0.90	0.17	76,76,76,76	0
54	MG	1a	1762	1/1	0.90	0.12	72,72,72,72	0
54	MG	1G	202	1/1	0.90	0.32	63,63,63,63	0
54	MG	1A	3375	1/1	0.90	0.15	63,63,63,63	0
54	MG	1A	3735	1/1	0.90	0.10	43,43,43,43	0
54	MG	2A	3578	1/1	0.90	0.19	71,71,71,71	0
54	MG	1A	3451	1/1	0.90	0.24	34,34,34,34	0
54	MG	2A	3383	1/1	0.90	0.16	60,60,60,60	0
54	MG	1A	3161	1/1	0.91	0.27	45,45,45,45	0
54	MG	1A	3486	1/1	0.91	0.23	73,73,73,73	0
54	MG	1a	1685	1/1	0.91	0.23	78,78,78,78	0
54	MG	2A	3104	1/1	0.91	0.14	65,65,65,65	0
54	MG	2I	201	1/1	0.91	0.09	78,78,78,78	0
54	MG	1A	3739	1/1	0.91	0.37	59,59,59,59	0
54	MG	2A	3514	1/1	0.91	0.11	76,76,76,76	0
54	MG	1A	3162	1/1	0.91	0.40	45,45,45,45	0
54	MG	2A	3275	1/1	0.91	0.34	72,72,72,72	0
54	MG	2A	3276	1/1	0.91	0.34	70,70,70,70	0
54	MG	2A	3110	1/1	0.91	0.12	69,69,69,69	0
54	MG	1A	3865	1/1	0.91	0.09	48,48,48,48	0
54	MG	1A	3652	1/1	0.91	0.16	60,60,60,60	0
54	MG	1A	3426	1/1	0.91	0.17	29,29,29,29	0
54	MG	1A	3657	1/1	0.91	0.10	48,48,48,48	0
54	MG	1A	3748	1/1	0.91	0.12	39,39,39,39	0
54	MG	1a	1866	1/1	0.91	0.20	67,67,67,67	0
54	MG	1U	201	1/1	0.91	0.14	42,42,42,42	0
54	MG	1A	3992	1/1	0.91	0.12	63,63,63,63	0
54	MG	2A	3531	1/1	0.91	0.71	57,57,57,57	0
54	MG	1A	3750	1/1	0.91	0.26	48,48,48,48	0
54	MG	1A	3124	1/1	0.91	0.20	36,36,36,36	0
54	MG	2A	3535	1/1	0.91	0.20	73,73,73,73	0
54	MG	1a	1700	1/1	0.91	0.26	62,62,62,62	0
54	MG	1A	3495	1/1	0.91	0.18	34,34,34,34	0
54	MG	1Y	201	1/1	0.91	0.16	55,55,55,55	0
54	MG	2A	3300	1/1	0.91	0.13	67,67,67,67	0
54	MG	2A	3304	1/1	0.91	0.15	69,69,69,69	0
54	MG	2A	3547	1/1	0.91	0.12	56,56,56,56	0
54	MG	10	101	1/1	0.91	0.18	43,43,43,43	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	1A	3580	1/1	0.91	0.24	44,44,44,44	0
54	MG	1A	3358	1/1	0.91	0.16	34,34,34,34	0
54	MG	1A	3582	1/1	0.91	0.27	65,65,65,65	0
54	MG	1A	4004	1/1	0.91	0.49	52,52,52,52	0
54	MG	1A	3090	1/1	0.91	0.34	47,47,47,47	0
54	MG	1A	3501	1/1	0.91	0.22	27,27,27,27	0
54	MG	2A	3565	1/1	0.91	0.09	83,83,83,83	0
54	MG	1A	4008	1/1	0.91	0.29	41,41,41,41	0
54	MG	1A	3502	1/1	0.91	0.21	42,42,42,42	0
54	MG	1A	3671	1/1	0.91	0.18	48,48,48,48	0
54	MG	2a	3032	1/1	0.91	0.16	91,91,91,91	0
54	MG	1a	1722	1/1	0.91	0.17	76,76,76,76	0
54	MG	2A	3575	1/1	0.91	0.13	64,64,64,64	0
54	MG	2A	3331	1/1	0.91	0.15	58,58,58,58	0
54	MG	2A	3141	1/1	0.91	0.36	54,54,54,54	0
54	MG	1A	3192	1/1	0.91	0.18	53,53,53,53	0
54	MG	1A	3289	1/1	0.91	0.47	40,40,40,40	0
54	MG	1A	3776	1/1	0.91	0.33	72,72,72,72	0
54	MG	17	106	1/1	0.91	0.21	62,62,62,62	0
54	MG	2A	3591	1/1	0.91	0.11	52,52,52,52	0
54	MG	1A	3591	1/1	0.91	0.31	53,53,53,53	0
54	MG	2A	3343	1/1	0.91	0.10	68,68,68,68	0
54	MG	1m	201	1/1	0.91	0.10	76,76,76,76	0
54	MG	1A	3892	1/1	0.91	0.14	56,56,56,56	0
54	MG	19	102	1/1	0.91	0.19	61,61,61,61	0
54	MG	2a	3053	1/1	0.91	0.31	72,72,72,72	0
54	MG	1A	3441	1/1	0.91	0.20	33,33,33,33	0
54	MG	1a	1745	1/1	0.91	0.15	70,70,70,70	0
54	MG	1a	1747	1/1	0.91	0.22	75,75,75,75	0
54	MG	2A	3002	1/1	0.91	0.10	70,70,70,70	0
54	MG	1A	3369	1/1	0.91	0.20	60,60,60,60	0
54	MG	1A	3897	1/1	0.91	0.21	40,40,40,40	0
54	MG	1A	3170	1/1	0.91	0.16	54,54,54,54	0
54	MG	1a	1754	1/1	0.91	0.16	77,77,77,77	0
54	MG	1A	3598	1/1	0.91	0.20	71,71,71,71	0
54	MG	1A	4023	1/1	0.91	0.23	46,46,46,46	0
54	MG	1A	3686	1/1	0.91	0.11	58,58,58,58	0
54	MG	2A	3619	1/1	0.91	0.15	66,66,66,66	0
54	MG	2A	3620	1/1	0.91	0.12	79,79,79,79	0
54	MG	2A	3014	1/1	0.91	0.15	55,55,55,55	0
54	MG	1A	3325	1/1	0.91	0.42	64,64,64,64	0
54	MG	1A	3604	1/1	0.91	0.31	64,64,64,64	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	1A	3011	1/1	0.91	0.18	70,70,70,70	0
54	MG	1A	3153	1/1	0.91	0.25	52,52,52,52	0
54	MG	2a	3075	1/1	0.91	0.12	72,72,72,72	0
54	MG	1A	3693	1/1	0.91	0.12	61,61,61,61	0
54	MG	1A	3135	1/1	0.91	0.63	49,49,49,49	0
54	MG	1A	3096	1/1	0.91	0.17	43,43,43,43	0
54	MG	1a	1626	1/1	0.91	0.16	59,59,59,59	0
54	MG	2A	3637	1/1	0.91	0.06	83,83,83,83	0
54	MG	1A	3609	1/1	0.91	0.20	72,72,72,72	0
54	MG	1A	3922	1/1	0.91	0.07	55,55,55,55	0
54	MG	1A	3923	1/1	0.91	0.13	30,30,30,30	0
54	MG	1A	3332	1/1	0.91	0.12	29,29,29,29	0
54	MG	2A	3035	1/1	0.91	0.15	68,68,68,68	0
54	MG	1a	1633	1/1	0.91	0.15	42,42,42,42	0
54	MG	1A	3698	1/1	0.91	0.30	39,39,39,39	0
54	MG	2A	3409	1/1	0.91	0.16	51,51,51,51	0
54	MG	1A	3930	1/1	0.91	0.11	51,51,51,51	0
54	MG	1A	3811	1/1	0.91	0.32	61,61,61,61	0
54	MG	1a	1637	1/1	0.91	0.10	45,45,45,45	0
54	MG	2A	3422	1/1	0.91	0.16	66,66,66,66	0
54	MG	1A	3227	1/1	0.91	0.28	41,41,41,41	0
54	MG	2A	3044	1/1	0.91	0.12	62,62,62,62	0
54	MG	1A	3183	1/1	0.91	0.20	53,53,53,53	0
54	MG	1a	1640	1/1	0.91	0.15	78,78,78,78	0
54	MG	2A	3204	1/1	0.91	0.19	73,73,73,73	0
54	MG	1a	1790	1/1	0.91	0.11	73,73,73,73	0
54	MG	1A	3613	1/1	0.91	0.17	67,67,67,67	0
54	MG	1A	3387	1/1	0.91	0.17	39,39,39,39	0
54	MG	1A	3462	1/1	0.91	0.23	74,74,74,74	0
54	MG	2A	3676	1/1	0.91	0.10	47,47,47,47	0
54	MG	2a	3117	1/1	0.91	0.14	76,76,76,76	0
54	MG	1A	3273	1/1	0.91	0.29	71,71,71,71	0
54	MG	2A	3439	1/1	0.91	0.12	41,41,41,41	0
54	MG	2A	3682	1/1	0.91	0.12	60,60,60,60	0
54	MG	1A	3825	1/1	0.91	0.15	57,57,57,57	0
54	MG	1a	1799	1/1	0.91	0.16	80,80,80,80	0
54	MG	1A	3705	1/1	0.91	0.12	74,74,74,74	0
54	MG	1A	3543	1/1	0.91	0.14	64,64,64,64	0
54	MG	2A	3692	1/1	0.91	0.16	56,56,56,56	0
54	MG	1A	3304	1/1	0.91	0.20	45,45,45,45	0
54	MG	1A	3394	1/1	0.91	0.22	35,35,35,35	0
54	MG	2A	3061	1/1	0.91	0.07	76,76,76,76	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	2A	3699	1/1	0.91	0.12	71,71,71,71	0
54	MG	2A	3062	1/1	0.91	0.11	50,50,50,50	0
54	MG	2A	3701	1/1	0.91	0.14	64,64,64,64	0
54	MG	2A	3702	1/1	0.91	0.08	68,68,68,68	0
54	MG	1a	1808	1/1	0.91	0.10	61,61,61,61	0
54	MG	1A	3549	1/1	0.91	0.09	49,49,49,49	0
54	MG	2A	3454	1/1	0.91	0.11	58,58,58,58	0
54	MG	2A	3222	1/1	0.91	0.31	70,70,70,70	0
54	MG	1A	3626	1/1	0.91	0.11	56,56,56,56	0
54	MG	2A	3713	1/1	0.91	0.73	71,71,71,71	0
54	MG	1A	3395	1/1	0.91	0.15	70,70,70,70	0
54	MG	2A	3226	1/1	0.91	0.52	58,58,58,58	0
54	MG	1A	3343	1/1	0.91	0.50	65,65,65,65	0
54	MG	2a	3166	1/1	0.91	0.27	77,77,77,77	0
54	MG	1D	313	1/1	0.91	0.22	53,53,53,53	0
54	MG	2A	3072	1/1	0.91	0.10	34,34,34,34	0
54	MG	2a	3171	1/1	0.91	0.09	84,84,84,84	0
54	MG	1a	1818	1/1	0.91	0.21	72,72,72,72	0
54	MG	1A	3635	1/1	0.91	0.30	42,42,42,42	0
54	MG	2a	3174	1/1	0.91	0.20	68,68,68,68	0
54	MG	1a	1662	1/1	0.91	0.09	81,81,81,81	0
54	MG	2a	3177	1/1	0.91	0.19	67,67,67,67	0
54	MG	1a	1663	1/1	0.91	0.19	75,75,75,75	0
54	MG	1A	3956	1/1	0.91	0.11	62,62,62,62	0
54	MG	2a	3183	1/1	0.91	0.17	74,74,74,74	0
54	MG	1A	3958	1/1	0.91	0.21	34,34,34,34	0
54	MG	1E	301	1/1	0.91	0.76	52,52,52,52	0
54	MG	1A	3847	1/1	0.91	0.12	60,60,60,60	0
54	MG	2a	3188	1/1	0.91	0.18	88,88,88,88	0
54	MG	1A	3960	1/1	0.91	0.25	60,60,60,60	0
54	MG	1F	304	1/1	0.91	0.26	39,39,39,39	0
54	MG	2A	3086	1/1	0.91	0.20	45,45,45,45	0
54	MG	1F	305	1/1	0.91	0.26	46,46,46,46	0
54	MG	1A	3201	1/1	0.91	0.38	68,68,68,68	0
54	MG	1A	3966	1/1	0.91	0.29	33,33,33,33	0
54	MG	1A	3345	1/1	0.91	0.52	46,46,46,46	0
54	MG	1a	1837	1/1	0.91	0.14	72,72,72,72	0
54	MG	1a	1676	1/1	0.91	0.16	75,75,75,75	0
54	MG	1A	3202	1/1	0.91	0.21	42,42,42,42	0
54	MG	2B	216	1/1	0.91	0.07	86,86,86,86	0
54	MG	1A	3413	1/1	0.91	0.22	42,42,42,42	0
54	MG	2A	3498	1/1	0.91	0.07	65,65,65,65	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
54	MG	1A	3563	1/1	0.91	0.41	41,41,41,41	0
54	MG	2A	3262	1/1	0.91	0.20	65,65,65,65	0
54	MG	1A	3973	1/1	0.91	0.12	68,68,68,68	0
54	MG	1A	3418	1/1	0.91	0.27	31,31,31,31	0
54	MG	1A	3858	1/1	0.91	0.21	43,43,43,43	0
54	MG	2A	3504	1/1	0.91	0.14	59,59,59,59	0
54	MG	1A	3533	1/1	0.92	0.11	63,63,63,63	0
54	MG	2A	3598	1/1	0.92	0.26	71,71,71,71	0
54	MG	2A	3406	1/1	0.92	0.27	60,60,60,60	0
54	MG	1a	1792	1/1	0.92	0.17	76,76,76,76	0
54	MG	1A	3722	1/1	0.92	0.30	43,43,43,43	0
54	MG	1y	203	1/1	0.92	0.24	90,90,90,90	0
54	MG	1B	208	1/1	0.92	0.13	56,56,56,56	0
54	MG	2A	3609	1/1	0.92	0.12	50,50,50,50	0
54	MG	2A	3115	1/1	0.92	0.27	65,65,65,65	0
54	MG	1A	3129	1/1	0.92	0.20	54,54,54,54	0
54	MG	17	101	1/1	0.92	0.15	38,38,38,38	0
54	MG	1A	3256	1/1	0.92	0.25	43,43,43,43	0
54	MG	2A	3241	1/1	0.92	0.45	51,51,51,51	0
54	MG	1A	3663	1/1	0.92	0.27	34,34,34,34	0
54	MG	1A	3539	1/1	0.92	0.23	79,79,79,79	0
54	MG	2A	3009	1/1	0.92	0.35	49,49,49,49	0
54	MG	1A	3349	1/1	0.92	0.15	66,66,66,66	0
54	MG	2A	3625	1/1	0.92	0.12	69,69,69,69	0
54	MG	1A	3542	1/1	0.92	0.06	61,61,61,61	0
54	MG	1A	3203	1/1	0.92	0.33	51,51,51,51	0
54	MG	1a	1811	1/1	0.92	0.16	85,85,85,85	0
54	MG	2a	3041	1/1	0.92	0.21	80,80,80,80	0
54	MG	1A	3544	1/1	0.92	0.14	28,28,28,28	0
54	MG	1A	3292	1/1	0.92	0.59	52,52,52,52	0
54	MG	1A	3487	1/1	0.92	0.15	59,59,59,59	0
54	MG	1A	3103	1/1	0.92	0.40	50,50,50,50	0
54	MG	1A	3353	1/1	0.92	0.22	33,33,33,33	0
54	MG	1A	3904	1/1	0.92	0.21	52,52,52,52	0
54	MG	1D	305	1/1	0.92	0.42	50,50,50,50	0
54	MG	1A	3491	1/1	0.92	0.10	58,58,58,58	0
54	MG	2A	3641	1/1	0.92	0.05	65,65,65,65	0
54	MG	2A	3265	1/1	0.92	0.22	74,74,74,74	0
54	MG	2A	3029	1/1	0.92	0.23	52,52,52,52	0
54	MG	2A	3030	1/1	0.92	0.21	42,42,42,42	0
54	MG	1a	1612	1/1	0.92	0.16	36,36,36,36	0
54	MG	1a	1701	1/1	0.92	0.11	65,65,65,65	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
54	MG	1A	3615	1/1	0.92	0.21	33,33,33,33	0
54	MG	1A	3908	1/1	0.92	0.07	61,61,61,61	0
54	MG	1A	3993	1/1	0.92	0.28	61,61,61,61	0
54	MG	1a	1827	1/1	0.92	0.14	56,56,56,56	0
54	MG	1a	1828	1/1	0.92	0.23	56,56,56,56	0
54	MG	1A	3994	1/1	0.92	0.08	71,71,71,71	0
54	MG	1a	1624	1/1	0.92	0.10	54,54,54,54	0
54	MG	2A	3465	1/1	0.92	0.18	67,67,67,67	0
54	MG	1A	3911	1/1	0.92	0.17	63,63,63,63	0
54	MG	1A	3045	1/1	0.92	0.57	39,39,39,39	0
54	MG	2A	3282	1/1	0.92	0.28	73,73,73,73	0
54	MG	1A	3057	1/1	0.92	0.20	54,54,54,54	0
54	MG	2A	3471	1/1	0.92	0.09	65,65,65,65	0
54	MG	1A	3230	1/1	0.92	0.15	50,50,50,50	0
54	MG	1A	3839	1/1	0.92	0.33	37,37,37,37	0
54	MG	2A	3475	1/1	0.92	0.19	63,63,63,63	0
54	MG	2A	3163	1/1	0.92	0.20	67,67,67,67	0
54	MG	1A	3232	1/1	0.92	0.33	44,44,44,44	0
54	MG	2A	3683	1/1	0.92	0.11	50,50,50,50	0
54	MG	2A	3290	1/1	0.92	0.45	52,52,52,52	0
54	MG	1F	309	1/1	0.92	0.31	59,59,59,59	0
54	MG	1a	1721	1/1	0.92	0.18	56,56,56,56	0
54	MG	1F	312	1/1	0.92	0.18	45,45,45,45	0
54	MG	1A	3403	1/1	0.92	0.09	55,55,55,55	0
54	MG	1A	3236	1/1	0.92	0.25	44,44,44,44	0
54	MG	2A	3172	1/1	0.92	0.37	66,66,66,66	0
54	MG	1a	1846	1/1	0.92	0.06	61,61,61,61	0
54	MG	2A	3302	1/1	0.92	0.14	57,57,57,57	0
54	MG	1A	3406	1/1	0.92	0.19	62,62,62,62	0
54	MG	2A	3497	1/1	0.92	0.18	73,73,73,73	0
54	MG	2A	3056	1/1	0.92	0.17	63,63,63,63	0
54	MG	1A	4007	1/1	0.92	0.16	62,62,62,62	0
54	MG	2A	3312	1/1	0.92	0.09	70,70,70,70	0
54	MG	2A	3314	1/1	0.92	0.11	68,68,68,68	0
54	MG	1A	3407	1/1	0.92	0.24	67,67,67,67	0
54	MG	1A	3100	1/1	0.92	0.10	55,55,55,55	0
54	MG	2A	3318	1/1	0.92	0.12	43,43,43,43	0
54	MG	1a	1738	1/1	0.92	0.23	72,72,72,72	0
54	MG	1A	3508	1/1	0.92	0.18	40,40,40,40	0
54	MG	2a	3114	1/1	0.92	0.35	72,72,72,72	0
54	MG	2A	3182	1/1	0.92	0.26	72,72,72,72	0
54	MG	2A	3719	1/1	0.92	0.08	79,79,79,79	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	2A	3064	1/1	0.92	0.17	63,63,63,63	0
54	MG	2A	3512	1/1	0.92	0.12	60,60,60,60	0
54	MG	1A	3125	1/1	0.92	0.17	44,44,44,44	0
54	MG	1A	3935	1/1	0.92	0.08	52,52,52,52	0
54	MG	1A	3416	1/1	0.92	0.22	35,35,35,35	0
54	MG	1A	3513	1/1	0.92	0.23	29,29,29,29	0
54	MG	2a	3126	1/1	0.92	0.17	78,78,78,78	0
54	MG	2a	3127	1/1	0.92	0.08	79,79,79,79	0
54	MG	1A	3514	1/1	0.92	0.12	43,43,43,43	0
54	MG	2A	3335	1/1	0.92	0.21	71,71,71,71	0
54	MG	2a	3131	1/1	0.92	0.29	83,83,83,83	0
54	MG	2A	3730	1/1	0.92	0.18	68,68,68,68	0
54	MG	1a	1865	1/1	0.92	0.09	71,71,71,71	0
54	MG	1A	3215	1/1	0.92	0.39	46,46,46,46	0
54	MG	1a	1650	1/1	0.92	0.27	65,65,65,65	0
54	MG	1A	3780	1/1	0.92	0.14	72,72,72,72	0
54	MG	1A	3941	1/1	0.92	0.10	63,63,63,63	0
54	MG	1R	203	1/1	0.92	0.18	52,52,52,52	0
54	MG	2a	3140	1/1	0.92	0.23	72,72,72,72	0
54	MG	1A	3467	1/1	0.92	0.18	63,63,63,63	0
54	MG	1A	3374	1/1	0.92	0.18	34,34,34,34	0
54	MG	2A	3347	1/1	0.92	0.11	35,35,35,35	0
54	MG	1A	3645	1/1	0.92	0.24	31,31,31,31	0
54	MG	1A	3646	1/1	0.92	0.24	38,38,38,38	0
54	MG	1U	202	1/1	0.92	0.20	40,40,40,40	0
54	MG	1A	3948	1/1	0.92	0.12	50,50,50,50	0
54	MG	1a	1879	1/1	0.92	0.14	75,75,75,75	0
54	MG	1A	3791	1/1	0.92	0.24	62,62,62,62	0
54	MG	2A	3360	1/1	0.92	0.18	72,72,72,72	0
54	MG	2A	3544	1/1	0.92	0.17	60,60,60,60	0
54	MG	1A	3424	1/1	0.92	0.22	30,30,30,30	0
54	MG	1A	3101	1/1	0.92	0.26	46,46,46,46	0
54	MG	1A	3871	1/1	0.92	0.11	66,66,66,66	0
54	MG	1d	305	1/1	0.92	0.06	74,74,74,74	0
54	MG	1Z	301	1/1	0.92	0.23	73,73,73,73	0
54	MG	2E	303	1/1	0.92	0.18	39,39,39,39	0
54	MG	2A	3213	1/1	0.92	0.12	72,72,72,72	0
54	MG	1A	3009	1/1	0.92	0.23	33,33,33,33	0
54	MG	2A	3376	1/1	0.92	0.12	70,70,70,70	0
54	MG	1a	1669	1/1	0.92	0.13	76,76,76,76	0
54	MG	2O	201	1/1	0.92	0.17	79,79,79,79	0
54	MG	2A	3564	1/1	0.92	0.09	64,64,64,64	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	1A	3146	1/1	0.92	0.20	48,48,48,48	0
54	MG	1A	3474	1/1	0.92	0.18	53,53,53,53	0
54	MG	1a	1672	1/1	0.92	0.16	74,74,74,74	0
54	MG	2A	3571	1/1	0.92	0.24	46,46,46,46	0
54	MG	2A	3387	1/1	0.92	0.15	74,74,74,74	0
54	MG	2e	202	1/1	0.92	0.13	77,77,77,77	0
54	MG	2A	3388	1/1	0.92	0.23	63,63,63,63	0
54	MG	2A	3574	1/1	0.92	0.19	60,60,60,60	0
54	MG	2A	3219	1/1	0.92	0.11	62,62,62,62	0
54	MG	2A	3391	1/1	0.92	0.20	75,75,75,75	0
54	MG	1A	3802	1/1	0.92	0.22	48,48,48,48	0
54	MG	2A	3579	1/1	0.92	0.10	59,59,59,59	0
54	MG	2A	3100	1/1	0.92	0.12	56,56,56,56	0
54	MG	2a	3002	1/1	0.92	0.10	75,75,75,75	0
54	MG	2A	3397	1/1	0.92	0.16	61,61,61,61	0
54	MG	2A	3398	1/1	0.92	0.13	40,40,40,40	0
54	MG	1A	3656	1/1	0.92	0.10	77,77,77,77	0
54	MG	1k	201	1/1	0.92	0.14	54,54,54,54	0
54	MG	1B	202	1/1	0.92	0.24	70,70,70,70	0
54	MG	1A	3531	1/1	0.92	0.18	73,73,73,73	0
54	MG	2A	3227	1/1	0.92	0.37	56,56,56,56	0
54	MG	2a	3012	1/1	0.92	0.17	60,60,60,60	0
54	MG	1A	3806	1/1	0.92	0.09	44,44,44,44	0
54	MG	1a	1815	1/1	0.93	0.17	66,66,66,66	0
54	MG	1A	3274	1/1	0.93	0.41	50,50,50,50	0
54	MG	1A	3599	1/1	0.93	0.11	66,66,66,66	0
54	MG	1B	219	1/1	0.93	0.17	38,38,38,38	0
54	MG	2A	3146	1/1	0.93	0.40	60,60,60,60	0
54	MG	1A	3725	1/1	0.93	0.26	46,46,46,46	0
54	MG	1B	221	1/1	0.93	0.12	72,72,72,72	0
54	MG	2A	3150	1/1	0.93	0.14	52,52,52,52	0
54	MG	2A	3622	1/1	0.93	0.09	85,85,85,85	0
54	MG	1a	1698	1/1	0.93	0.27	74,74,74,74	0
54	MG	2A	3624	1/1	0.93	0.17	61,61,61,61	0
54	MG	1A	3540	1/1	0.93	0.14	27,27,27,27	0
54	MG	2A	3153	1/1	0.93	0.11	63,63,63,63	0
54	MG	2A	3629	1/1	0.93	0.17	73,73,73,73	0
54	MG	1A	3143	1/1	0.93	0.49	50,50,50,50	0
54	MG	2A	3281	1/1	0.93	0.29	74,74,74,74	0
54	MG	2A	3455	1/1	0.93	0.19	69,69,69,69	0
54	MG	2A	3456	1/1	0.93	0.13	68,68,68,68	0
54	MG	1A	3979	1/1	0.93	0.23	81,81,81,81	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	2a	3035	1/1	0.93	0.09	46,46,46,46	0
54	MG	1A	3335	1/1	0.93	0.22	78,78,78,78	0
54	MG	1A	3179	1/1	0.93	0.34	37,37,37,37	0
54	MG	1A	3251	1/1	0.93	0.37	41,41,41,41	0
54	MG	1D	307	1/1	0.93	0.23	47,47,47,47	0
54	MG	1A	3307	1/1	0.93	0.19	57,57,57,57	0
54	MG	2A	3288	1/1	0.93	0.19	65,65,65,65	0
54	MG	1A	3181	1/1	0.93	0.22	61,61,61,61	0
54	MG	1a	1620	1/1	0.93	0.13	71,71,71,71	0
54	MG	2A	3646	1/1	0.93	0.15	67,67,67,67	0
54	MG	2A	3647	1/1	0.93	0.12	89,89,89,89	0
54	MG	2A	3293	1/1	0.93	0.10	68,68,68,68	0
54	MG	2A	3467	1/1	0.93	0.09	73,73,73,73	0
54	MG	1A	3548	1/1	0.93	0.14	53,53,53,53	0
54	MG	1A	3155	1/1	0.93	0.19	57,57,57,57	0
54	MG	2a	3052	1/1	0.93	0.18	55,55,55,55	0
54	MG	1A	3991	1/1	0.93	0.17	62,62,62,62	0
54	MG	2A	3170	1/1	0.93	0.15	61,61,61,61	0
54	MG	1a	1715	1/1	0.93	0.21	76,76,76,76	0
54	MG	1a	1839	1/1	0.93	0.11	51,51,51,51	0
54	MG	2A	3173	1/1	0.93	0.11	71,71,71,71	0
54	MG	1A	3553	1/1	0.93	0.23	61,61,61,61	0
54	MG	1A	3554	1/1	0.93	0.19	34,34,34,34	0
54	MG	1a	1719	1/1	0.93	0.27	63,63,63,63	0
54	MG	1A	3746	1/1	0.93	0.11	57,57,57,57	0
54	MG	1a	1844	1/1	0.93	0.10	61,61,61,61	0
54	MG	1A	3912	1/1	0.93	0.19	35,35,35,35	0
54	MG	2A	3668	1/1	0.93	0.07	76,76,76,76	0
54	MG	2A	3671	1/1	0.93	0.16	60,60,60,60	0
54	MG	1A	3831	1/1	0.93	0.14	39,39,39,39	0
54	MG	2A	3674	1/1	0.93	0.18	62,62,62,62	0
54	MG	2A	3059	1/1	0.93	0.08	54,54,54,54	0
54	MG	1a	1728	1/1	0.93	0.17	46,46,46,46	0
54	MG	1A	3388	1/1	0.93	0.26	27,27,27,27	0
54	MG	1F	307	1/1	0.93	0.31	33,33,33,33	0
54	MG	1A	3169	1/1	0.93	0.17	36,36,36,36	0
54	MG	1A	3257	1/1	0.93	0.71	51,51,51,51	0
54	MG	2A	3684	1/1	0.93	0.16	71,71,71,71	0
54	MG	2A	3326	1/1	0.93	0.23	76,76,76,76	0
54	MG	2a	3080	1/1	0.93	0.18	61,61,61,61	0
54	MG	2a	3081	1/1	0.93	0.13	76,76,76,76	0
54	MG	2A	3687	1/1	0.93	0.13	52,52,52,52	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	2A	3688	1/1	0.93	0.11	72,72,72,72	0
54	MG	1a	1736	1/1	0.93	0.16	45,45,45,45	0
54	MG	1A	3837	1/1	0.93	0.09	72,72,72,72	0
54	MG	1A	3313	1/1	0.93	0.45	41,41,41,41	0
54	MG	1A	3754	1/1	0.93	0.14	39,39,39,39	0
54	MG	1a	1740	1/1	0.93	0.18	60,60,60,60	0
54	MG	1A	3287	1/1	0.93	0.14	39,39,39,39	0
54	MG	2a	3091	1/1	0.93	0.11	70,70,70,70	0
54	MG	1A	3926	1/1	0.93	0.10	53,53,53,53	0
54	MG	1A	3453	1/1	0.93	0.19	21,21,21,21	0
54	MG	1A	3758	1/1	0.93	0.16	37,37,37,37	0
54	MG	2A	3510	1/1	0.93	0.31	66,66,66,66	0
54	MG	1A	3213	1/1	0.93	0.49	45,45,45,45	0
54	MG	1a	1752	1/1	0.93	0.07	71,71,71,71	0
54	MG	2A	3079	1/1	0.93	0.29	59,59,59,59	0
54	MG	1A	3400	1/1	0.93	0.06	64,64,64,64	0
54	MG	1a	1871	1/1	0.93	0.12	70,70,70,70	0
54	MG	2A	3711	1/1	0.93	0.19	62,62,62,62	0
54	MG	1A	3692	1/1	0.93	0.14	58,58,58,58	0
54	MG	2A	3351	1/1	0.93	0.08	54,54,54,54	0
54	MG	2a	3109	1/1	0.93	0.29	57,57,57,57	0
54	MG	1A	3854	1/1	0.93	0.18	35,35,35,35	0
54	MG	1A	3214	1/1	0.93	0.30	56,56,56,56	0
54	MG	1A	3856	1/1	0.93	0.28	50,50,50,50	0
54	MG	1a	1761	1/1	0.93	0.10	79,79,79,79	0
54	MG	1a	1877	1/1	0.93	0.40	73,73,73,73	0
54	MG	1Q	203	1/1	0.93	0.26	51,51,51,51	0
54	MG	1A	3402	1/1	0.93	0.20	40,40,40,40	0
54	MG	1A	3572	1/1	0.93	0.26	48,48,48,48	0
54	MG	2A	3529	1/1	0.93	0.12	46,46,46,46	0
54	MG	2A	3726	1/1	0.93	0.21	69,69,69,69	0
54	MG	1A	3322	1/1	0.93	0.59	48,48,48,48	0
54	MG	2A	3368	1/1	0.93	0.14	78,78,78,78	0
54	MG	1A	3150	1/1	0.93	0.20	42,42,42,42	0
54	MG	2a	3128	1/1	0.93	0.10	73,73,73,73	0
54	MG	1A	3577	1/1	0.93	0.19	57,57,57,57	0
54	MG	1a	1770	1/1	0.93	0.12	75,75,75,75	0
54	MG	1A	3405	1/1	0.93	0.18	58,58,58,58	0
54	MG	2B	203	1/1	0.93	0.15	79,79,79,79	0
54	MG	2A	3538	1/1	0.93	0.09	75,75,75,75	0
54	MG	1A	3946	1/1	0.93	0.07	58,58,58,58	0
54	MG	2A	3541	1/1	0.93	0.11	60,60,60,60	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
54	MG	1A	3237	1/1	0.93	0.26	36,36,36,36	0
54	MG	1A	3364	1/1	0.93	0.20	48,48,48,48	0
54	MG	1V	203	1/1	0.93	0.17	46,46,46,46	0
54	MG	2A	3545	1/1	0.93	0.20	59,59,59,59	0
54	MG	2A	3384	1/1	0.93	0.25	73,73,73,73	0
54	MG	1A	3522	1/1	0.93	0.22	67,67,67,67	0
54	MG	2a	3145	1/1	0.93	0.23	72,72,72,72	0
54	MG	2A	3386	1/1	0.93	0.11	68,68,68,68	0
54	MG	2A	3551	1/1	0.93	0.08	59,59,59,59	0
54	MG	1A	3410	1/1	0.93	0.23	32,32,32,32	0
54	MG	1A	3266	1/1	0.93	0.16	74,74,74,74	0
54	MG	1W	203	1/1	0.93	0.20	56,56,56,56	0
54	MG	2D	304	1/1	0.93	0.66	60,60,60,60	0
54	MG	2A	3390	1/1	0.93	0.14	70,70,70,70	0
54	MG	2A	3108	1/1	0.93	0.29	74,74,74,74	0
54	MG	2a	3165	1/1	0.93	0.16	79,79,79,79	0
54	MG	1A	3787	1/1	0.93	0.21	61,61,61,61	0
54	MG	2D	310	1/1	0.93	0.13	61,61,61,61	0
54	MG	1l	202	1/1	0.93	0.10	75,75,75,75	0
54	MG	1a	1783	1/1	0.93	0.16	58,58,58,58	0
54	MG	1A	3160	1/1	0.93	1.54	51,51,51,51	0
54	MG	1A	3648	1/1	0.93	0.25	69,69,69,69	0
54	MG	1A	4037	1/1	0.93	0.19	71,71,71,71	0
54	MG	1y	201	1/1	0.93	0.25	72,72,72,72	0
54	MG	1A	3414	1/1	0.93	0.22	48,48,48,48	0
54	MG	2a	3178	1/1	0.93	0.12	82,82,82,82	0
54	MG	2G	202	1/1	0.93	0.10	91,91,91,91	0
54	MG	10	105	1/1	0.93	0.09	55,55,55,55	0
54	MG	1A	3037	1/1	0.93	0.20	47,47,47,47	0
54	MG	1A	4040	1/1	0.93	0.09	61,61,61,61	0
54	MG	1A	3798	1/1	0.93	0.30	30,30,30,30	0
54	MG	2a	3186	1/1	0.93	0.25	75,75,75,75	0
54	MG	1A	3329	1/1	0.93	0.20	43,43,43,43	0
54	MG	1a	1795	1/1	0.93	0.09	78,78,78,78	0
54	MG	2V	202	1/1	0.93	0.31	65,65,65,65	0
54	MG	2W	201	1/1	0.93	0.37	70,70,70,70	0
54	MG	2A	3413	1/1	0.93	0.15	42,42,42,42	0
54	MG	1l	103	1/1	0.93	0.19	58,58,58,58	0
54	MG	2A	3416	1/1	0.93	0.17	66,66,66,66	0
54	MG	2A	3417	1/1	0.93	0.17	46,46,46,46	0
54	MG	1A	3962	1/1	0.93	0.26	51,51,51,51	0
54	MG	1A	3716	1/1	0.93	0.17	66,66,66,66	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	27	102	1/1	0.93	0.36	47,47,47,47	0
54	MG	14	101	1/1	0.93	0.07	82,82,82,82	0
54	MG	1A	3965	1/1	0.93	0.15	32,32,32,32	0
54	MG	1A	3718	1/1	0.93	0.33	48,48,48,48	0
54	MG	2A	3258	1/1	0.93	0.55	50,50,50,50	0
54	MG	1A	3532	1/1	0.93	0.15	53,53,53,53	0
54	MG	1A	3371	1/1	0.93	0.23	31,31,31,31	0
54	MG	17	102	1/1	0.93	0.19	48,48,48,48	0
58	ARG	1B	230	12/12	0.93	0.20	32,44,59,61	0
54	MG	1A	3032	1/1	0.93	0.20	65,65,65,65	0
54	MG	1A	3331	1/1	0.93	0.15	56,56,56,56	0
54	MG	1A	3972	1/1	0.93	0.13	64,64,64,64	0
59	ZN	29	501	1/1	0.93	0.16	77,77,77,77	0
54	MG	2a	3009	1/1	0.93	0.11	76,76,76,76	0
54	MG	1A	3083	1/1	0.94	0.20	40,40,40,40	0
54	MG	2A	3375	1/1	0.94	0.12	73,73,73,73	0
54	MG	2A	3570	1/1	0.94	0.24	57,57,57,57	0
54	MG	1A	3006	1/1	0.94	0.17	36,36,36,36	0
54	MG	1a	1695	1/1	0.94	0.23	52,52,52,52	0
54	MG	1A	3827	1/1	0.94	0.34	52,52,52,52	0
54	MG	2A	3063	1/1	0.94	0.47	61,61,61,61	0
54	MG	1A	3420	1/1	0.94	0.16	45,45,45,45	0
54	MG	1A	3489	1/1	0.94	0.14	64,64,64,64	0
54	MG	1A	4033	1/1	0.94	0.12	62,62,62,62	0
54	MG	13	102	1/1	0.94	0.15	72,72,72,72	0
54	MG	2A	3580	1/1	0.94	0.05	68,68,68,68	0
54	MG	1A	3316	1/1	0.94	0.21	54,54,54,54	0
54	MG	15	103	1/1	0.94	0.27	46,46,46,46	0
54	MG	1A	3320	1/1	0.94	0.14	47,47,47,47	0
54	MG	1A	3059	1/1	0.94	0.26	29,29,29,29	0
54	MG	1A	3565	1/1	0.94	0.16	36,36,36,36	0
54	MG	1A	3494	1/1	0.94	0.19	35,35,35,35	0
54	MG	2A	3075	1/1	0.94	0.80	60,60,60,60	0
54	MG	2A	3594	1/1	0.94	0.12	43,43,43,43	0
54	MG	1A	3429	1/1	0.94	0.14	60,60,60,60	0
54	MG	1A	3649	1/1	0.94	0.22	57,57,57,57	0
54	MG	1B	201	1/1	0.94	0.34	64,64,64,64	0
54	MG	1a	1848	1/1	0.94	0.07	62,62,62,62	0
54	MG	1A	3843	1/1	0.94	0.16	20,20,20,20	0
54	MG	2A	3601	1/1	0.94	0.12	42,42,42,42	0
54	MG	2A	3602	1/1	0.94	0.07	71,71,71,71	0
54	MG	2a	3022	1/1	0.94	0.15	54,54,54,54	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	2a	3023	1/1	0.94	0.28	76,76,76,76	0
54	MG	1a	1712	1/1	0.94	0.12	76,76,76,76	0
54	MG	1a	1851	1/1	0.94	0.14	65,65,65,65	0
54	MG	2A	3225	1/1	0.94	0.77	57,57,57,57	0
54	MG	1A	3943	1/1	0.94	0.13	75,75,75,75	0
54	MG	1a	1714	1/1	0.94	0.21	68,68,68,68	0
54	MG	2A	3085	1/1	0.94	1.15	58,58,58,58	0
54	MG	2A	3611	1/1	0.94	0.06	73,73,73,73	0
54	MG	2A	3410	1/1	0.94	0.20	78,78,78,78	0
54	MG	2A	3411	1/1	0.94	0.19	67,67,67,67	0
54	MG	1A	3087	1/1	0.94	0.66	47,47,47,47	0
54	MG	1a	1857	1/1	0.94	0.11	58,58,58,58	0
54	MG	1A	3431	1/1	0.94	0.16	33,33,33,33	0
54	MG	1A	3432	1/1	0.94	0.12	71,71,71,71	0
54	MG	1A	3030	1/1	0.94	0.15	33,33,33,33	0
54	MG	1a	1720	1/1	0.94	0.21	63,63,63,63	0
54	MG	2A	3421	1/1	0.94	0.22	80,80,80,80	0
54	MG	1A	3503	1/1	0.94	0.23	29,29,29,29	0
54	MG	1A	3280	1/1	0.94	0.43	48,48,48,48	0
54	MG	2a	3044	1/1	0.94	0.10	91,91,91,91	0
54	MG	2a	3045	1/1	0.94	0.25	73,73,73,73	0
54	MG	1B	211	1/1	0.94	0.23	71,71,71,71	0
54	MG	1A	3851	1/1	0.94	0.19	50,50,50,50	0
54	MG	2A	3428	1/1	0.94	0.12	67,67,67,67	0
54	MG	1a	1729	1/1	0.94	0.13	72,72,72,72	0
54	MG	1a	1609	1/1	0.94	0.30	62,62,62,62	0
54	MG	1A	3852	1/1	0.94	0.18	49,49,49,49	0
54	MG	1A	3061	1/1	0.94	0.20	56,56,56,56	0
54	MG	1A	3121	1/1	0.94	0.34	38,38,38,38	0
54	MG	1a	1613	1/1	0.94	0.27	75,75,75,75	0
54	MG	1A	3122	1/1	0.94	0.44	44,44,44,44	0
54	MG	1B	218	1/1	0.94	0.18	46,46,46,46	0
54	MG	2a	3057	1/1	0.94	0.10	66,66,66,66	0
54	MG	1A	3062	1/1	0.94	0.38	50,50,50,50	0
54	MG	2A	3640	1/1	0.94	0.08	69,69,69,69	0
54	MG	2A	3255	1/1	0.94	0.90	48,48,48,48	0
54	MG	2A	3106	1/1	0.94	0.14	53,53,53,53	0
54	MG	1A	3957	1/1	0.94	0.13	36,36,36,36	0
54	MG	2A	3444	1/1	0.94	0.18	48,48,48,48	0
54	MG	1a	1741	1/1	0.94	0.15	71,71,71,71	0
54	MG	1A	3092	1/1	0.94	0.13	44,44,44,44	0
54	MG	2A	3111	1/1	0.94	0.11	65,65,65,65	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	1A	3753	1/1	0.94	0.19	58,58,58,58	0
54	MG	2a	3069	1/1	0.94	0.14	74,74,74,74	0
54	MG	2A	3263	1/1	0.94	0.25	69,69,69,69	0
54	MG	1a	1746	1/1	0.94	0.16	62,62,62,62	0
54	MG	1A	3665	1/1	0.94	0.38	45,45,45,45	0
54	MG	1A	3036	1/1	0.94	0.29	41,41,41,41	0
54	MG	1B	228	1/1	0.94	0.14	76,76,76,76	0
54	MG	1A	3241	1/1	0.94	0.73	45,45,45,45	0
54	MG	1e	201	1/1	0.94	0.28	71,71,71,71	0
54	MG	2a	3077	1/1	0.94	0.20	66,66,66,66	0
54	MG	1A	3588	1/1	0.94	0.12	64,64,64,64	0
54	MG	1a	1630	1/1	0.94	0.16	50,50,50,50	0
54	MG	2A	3272	1/1	0.94	0.36	72,72,72,72	0
54	MG	2A	3662	1/1	0.94	0.07	56,56,56,56	0
54	MG	1D	303	1/1	0.94	0.24	46,46,46,46	0
54	MG	2A	3666	1/1	0.94	0.13	57,57,57,57	0
54	MG	1A	3031	1/1	0.94	0.15	25,25,25,25	0
54	MG	1A	3967	1/1	0.94	0.14	34,34,34,34	0
54	MG	2A	3670	1/1	0.94	0.07	72,72,72,72	0
54	MG	1A	3516	1/1	0.94	0.16	36,36,36,36	0
54	MG	2A	3672	1/1	0.94	0.12	47,47,47,47	0
54	MG	1D	310	1/1	0.94	0.22	55,55,55,55	0
54	MG	1a	1763	1/1	0.94	0.21	76,76,76,76	0
54	MG	1A	3334	1/1	0.94	0.11	51,51,51,51	0
54	MG	1A	3519	1/1	0.94	0.17	58,58,58,58	0
54	MG	1A	3048	1/1	0.94	0.17	30,30,30,30	0
54	MG	1A	3678	1/1	0.94	0.20	56,56,56,56	0
54	MG	1A	3770	1/1	0.94	0.27	52,52,52,52	0
54	MG	1a	1769	1/1	0.94	0.12	85,85,85,85	0
54	MG	1A	3049	1/1	0.94	0.35	57,57,57,57	0
54	MG	1t	201	1/1	0.94	0.10	66,66,66,66	0
54	MG	1A	3874	1/1	0.94	0.23	32,32,32,32	0
54	MG	1A	3680	1/1	0.94	0.29	55,55,55,55	0
54	MG	1a	1645	1/1	0.94	0.23	62,62,62,62	0
54	MG	2A	3292	1/1	0.94	0.18	74,74,74,74	0
54	MG	1E	308	1/1	0.94	0.13	75,75,75,75	0
54	MG	2A	3143	1/1	0.94	0.16	54,54,54,54	0
54	MG	2A	3693	1/1	0.94	0.07	49,49,49,49	0
54	MG	2A	3694	1/1	0.94	0.23	56,56,56,56	0
54	MG	2A	3484	1/1	0.94	0.13	38,38,38,38	0
54	MG	1A	3051	1/1	0.94	0.60	52,52,52,52	0
54	MG	2A	3296	1/1	0.94	0.16	46,46,46,46	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	1A	3396	1/1	0.94	0.14	58,58,58,58	0
54	MG	2A	3004	1/1	0.94	0.20	47,47,47,47	0
54	MG	1A	3600	1/1	0.94	0.20	33,33,33,33	0
54	MG	1A	3073	1/1	0.94	0.19	47,47,47,47	0
54	MG	2A	3703	1/1	0.94	0.16	68,68,68,68	0
54	MG	1a	1780	1/1	0.94	0.07	80,80,80,80	0
54	MG	1A	3171	1/1	0.94	0.14	32,32,32,32	0
54	MG	1A	3528	1/1	0.94	0.17	52,52,52,52	0
54	MG	1A	3785	1/1	0.94	0.25	52,52,52,52	0
54	MG	1A	3133	1/1	0.94	0.30	47,47,47,47	0
54	MG	2A	3313	1/1	0.94	0.08	51,51,51,51	0
54	MG	1A	3988	1/1	0.94	0.16	28,28,28,28	0
54	MG	1A	3530	1/1	0.94	0.23	31,31,31,31	0
54	MG	2A	3715	1/1	0.94	0.15	71,71,71,71	0
54	MG	1a	1787	1/1	0.94	0.12	68,68,68,68	0
54	MG	1A	3691	1/1	0.94	0.16	66,66,66,66	0
54	MG	2A	3509	1/1	0.94	0.12	49,49,49,49	0
54	MG	1G	203	1/1	0.94	0.23	57,57,57,57	0
54	MG	1A	3209	1/1	0.94	0.37	48,48,48,48	0
54	MG	1A	3052	1/1	0.94	0.50	42,42,42,42	0
54	MG	2a	3142	1/1	0.94	0.22	82,82,82,82	0
54	MG	1A	3259	1/1	0.94	0.36	45,45,45,45	0
54	MG	1A	3104	1/1	0.94	0.39	44,44,44,44	0
54	MG	2a	3146	1/1	0.94	0.11	68,68,68,68	0
54	MG	1A	3537	1/1	0.94	0.18	23,23,23,23	0
54	MG	1A	3136	1/1	0.94	0.23	39,39,39,39	0
54	MG	1A	3020	1/1	0.94	0.48	43,43,43,43	0
54	MG	1A	3803	1/1	0.94	0.13	42,42,42,42	0
54	MG	1A	3409	1/1	0.94	0.16	37,37,37,37	0
54	MG	2A	3333	1/1	0.94	0.09	65,65,65,65	0
54	MG	1A	3472	1/1	0.94	0.29	69,69,69,69	0
54	MG	1A	3141	1/1	0.94	0.12	57,57,57,57	0
54	MG	2a	3164	1/1	0.94	0.10	76,76,76,76	0
54	MG	1A	3620	1/1	0.94	0.16	58,58,58,58	0
54	MG	1a	1807	1/1	0.94	0.09	83,83,83,83	0
54	MG	1A	3907	1/1	0.94	0.29	72,72,72,72	0
54	MG	1a	1810	1/1	0.94	0.04	76,76,76,76	0
54	MG	2a	3169	1/1	0.94	0.23	76,76,76,76	0
54	MG	2A	3342	1/1	0.94	0.10	65,65,65,65	0
54	MG	1A	3411	1/1	0.94	0.25	29,29,29,29	0
54	MG	2A	3532	1/1	0.94	0.34	62,62,62,62	0
54	MG	1A	3909	1/1	0.94	0.26	43,43,43,43	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	2A	3345	1/1	0.94	0.10	58,58,58,58	0
54	MG	1A	3005	1/1	0.94	0.22	30,30,30,30	0
54	MG	2A	3536	1/1	0.94	0.10	68,68,68,68	0
54	MG	2a	3179	1/1	0.94	0.14	67,67,67,67	0
54	MG	1A	3360	1/1	0.94	0.21	43,43,43,43	0
54	MG	2A	3348	1/1	0.94	0.20	38,38,38,38	0
54	MG	2D	301	1/1	0.94	0.65	53,53,53,53	0
54	MG	2A	3539	1/1	0.94	0.07	90,90,90,90	0
54	MG	1A	3913	1/1	0.94	0.19	50,50,50,50	0
54	MG	2D	305	1/1	0.94	0.87	49,49,49,49	0
54	MG	2A	3350	1/1	0.94	0.12	45,45,45,45	0
54	MG	1A	3268	1/1	0.94	0.23	52,52,52,52	0
54	MG	1A	3916	1/1	0.94	0.15	51,51,51,51	0
54	MG	2A	3188	1/1	0.94	0.23	66,66,66,66	0
54	MG	1A	3917	1/1	0.94	0.18	39,39,39,39	0
54	MG	2A	3050	1/1	0.94	0.15	49,49,49,49	0
54	MG	1A	3482	1/1	0.94	0.14	62,62,62,62	0
54	MG	1A	4018	1/1	0.94	0.21	48,48,48,48	0
54	MG	2A	3361	1/1	0.94	0.16	49,49,49,49	0
54	MG	1A	3483	1/1	0.94	0.14	48,48,48,48	0
54	MG	1A	3484	1/1	0.94	0.19	30,30,30,30	0
54	MG	1A	3817	1/1	0.94	0.20	62,62,62,62	0
54	MG	2A	3556	1/1	0.94	0.04	76,76,76,76	0
54	MG	2A	3557	1/1	0.94	0.42	59,59,59,59	0
54	MG	1A	3629	1/1	0.94	0.49	40,40,40,40	0
54	MG	1A	3632	1/1	0.94	0.25	41,41,41,41	0
54	MG	2A	3199	1/1	0.94	0.27	58,58,58,58	0
54	MG	2T	201	1/1	0.94	0.14	71,71,71,71	0
54	MG	2T	203	1/1	0.94	0.16	63,63,63,63	0
54	MG	2A	3561	1/1	0.94	0.07	71,71,71,71	0
59	ZN	14	102	1/1	0.94	0.14	94,94,94,94	0
54	MG	1A	3218	1/1	0.94	0.47	51,51,51,51	0
54	MG	2A	3373	1/1	0.94	0.24	59,59,59,59	0
59	ZN	25	104	1/1	0.94	0.25	68,68,68,68	0
54	MG	2W	202	1/1	0.94	0.14	68,68,68,68	0
54	MG	2A	3566	1/1	0.94	0.13	74,74,74,74	0
54	MG	1A	3253	1/1	0.95	0.42	40,40,40,40	0
54	MG	2A	3650	1/1	0.95	0.23	62,62,62,62	0
54	MG	2A	3336	1/1	0.95	0.11	51,51,51,51	0
54	MG	1A	3443	1/1	0.95	0.17	71,71,71,71	0
54	MG	1N	203	1/1	0.95	0.24	47,47,47,47	0
54	MG	2a	3034	1/1	0.95	0.10	66,66,66,66	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	2A	3494	1/1	0.95	0.12	67,67,67,67	0
54	MG	2A	3496	1/1	0.95	0.17	48,48,48,48	0
54	MG	1A	3284	1/1	0.95	0.73	49,49,49,49	0
54	MG	2A	3203	1/1	0.95	0.18	76,76,76,76	0
54	MG	1P	201	1/1	0.95	0.40	36,36,36,36	0
54	MG	1a	1755	1/1	0.95	0.16	65,65,65,65	0
54	MG	1a	1756	1/1	0.95	0.17	68,68,68,68	0
54	MG	1A	3773	1/1	0.95	0.26	32,32,32,32	0
54	MG	1A	3119	1/1	0.95	0.53	47,47,47,47	0
54	MG	1A	3318	1/1	0.95	0.26	44,44,44,44	0
54	MG	1Q	202	1/1	0.95	0.18	35,35,35,35	0
54	MG	1A	3319	1/1	0.95	0.35	40,40,40,40	0
54	MG	2A	3507	1/1	0.95	0.14	40,40,40,40	0
54	MG	2A	3669	1/1	0.95	0.17	78,78,78,78	0
54	MG	1A	4025	1/1	0.95	0.58	44,44,44,44	0
54	MG	1A	3219	1/1	0.95	0.70	46,46,46,46	0
54	MG	1A	3177	1/1	0.95	0.55	47,47,47,47	0
54	MG	1a	1658	1/1	0.95	0.42	52,52,52,52	0
54	MG	1A	3025	1/1	0.95	0.68	43,43,43,43	0
54	MG	1a	1660	1/1	0.95	0.30	74,74,74,74	0
54	MG	1A	3597	1/1	0.95	0.12	46,46,46,46	0
54	MG	2A	3515	1/1	0.95	0.12	45,45,45,45	0
54	MG	1A	3496	1/1	0.95	0.19	61,61,61,61	0
54	MG	1T	204	1/1	0.95	0.10	78,78,78,78	0
54	MG	1e	202	1/1	0.95	0.38	62,62,62,62	0
54	MG	1A	3653	1/1	0.95	0.15	36,36,36,36	0
54	MG	2A	3364	1/1	0.95	0.17	56,56,56,56	0
54	MG	1A	3290	1/1	0.95	0.53	51,51,51,51	0
54	MG	1A	3709	1/1	0.95	0.16	35,35,35,35	0
54	MG	1U	207	1/1	0.95	0.21	40,40,40,40	0
54	MG	2A	3525	1/1	0.95	0.06	62,62,62,62	0
54	MG	1A	3712	1/1	0.95	0.10	67,67,67,67	0
54	MG	1A	3223	1/1	0.95	0.36	36,36,36,36	0
54	MG	2a	3068	1/1	0.95	0.18	78,78,78,78	0
54	MG	1a	1778	1/1	0.95	0.08	73,73,73,73	0
54	MG	1A	3794	1/1	0.95	0.19	47,47,47,47	0
54	MG	2A	3107	1/1	0.95	0.12	35,35,35,35	0
54	MG	1A	3071	1/1	0.95	0.52	34,34,34,34	0
54	MG	1A	3658	1/1	0.95	0.18	56,56,56,56	0
54	MG	1A	3873	1/1	0.95	0.25	43,43,43,43	0
54	MG	2A	3379	1/1	0.95	0.17	59,59,59,59	0
54	MG	2A	3234	1/1	0.95	0.14	70,70,70,70	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	1A	3053	1/1	0.95	0.13	37,37,37,37	0
54	MG	1A	3026	1/1	0.95	0.48	40,40,40,40	0
54	MG	1B	204	1/1	0.95	0.12	51,51,51,51	0
54	MG	1A	3876	1/1	0.95	0.08	39,39,39,39	0
54	MG	1A	3185	1/1	0.95	0.26	33,33,33,33	0
54	MG	1a	1788	1/1	0.95	0.15	72,72,72,72	0
54	MG	1A	3552	1/1	0.95	0.16	64,64,64,64	0
54	MG	1A	3505	1/1	0.95	0.26	32,32,32,32	0
54	MG	2A	3246	1/1	0.95	0.10	56,56,56,56	0
54	MG	1A	3463	1/1	0.95	0.13	18,18,18,18	0
54	MG	11	101	1/1	0.95	0.37	50,50,50,50	0
54	MG	1A	3882	1/1	0.95	0.37	43,43,43,43	0
54	MG	1A	3187	1/1	0.95	0.60	43,43,43,43	0
54	MG	2A	3718	1/1	0.95	0.16	75,75,75,75	0
54	MG	2A	3549	1/1	0.95	0.17	39,39,39,39	0
54	MG	1A	3726	1/1	0.95	0.15	58,58,58,58	0
54	MG	2A	3721	1/1	0.95	0.21	78,78,78,78	0
54	MG	2A	3252	1/1	0.95	0.17	47,47,47,47	0
54	MG	2A	3553	1/1	0.95	0.09	66,66,66,66	0
54	MG	1A	3727	1/1	0.95	0.40	51,51,51,51	0
54	MG	1A	3728	1/1	0.95	0.11	48,48,48,48	0
54	MG	1A	3667	1/1	0.95	0.16	73,73,73,73	0
54	MG	1A	3465	1/1	0.95	0.13	56,56,56,56	0
54	MG	1A	3063	1/1	0.95	0.09	38,38,38,38	0
54	MG	1A	3269	1/1	0.95	0.45	36,36,36,36	0
54	MG	2a	3107	1/1	0.95	0.37	66,66,66,66	0
54	MG	2A	3013	1/1	0.95	0.18	28,28,28,28	0
54	MG	1A	3055	1/1	0.95	0.48	34,34,34,34	0
54	MG	2A	3563	1/1	0.95	0.14	67,67,67,67	0
54	MG	2A	3015	1/1	0.95	0.50	48,48,48,48	0
54	MG	2a	3113	1/1	0.95	0.34	58,58,58,58	0
54	MG	1A	3127	1/1	0.95	0.27	58,58,58,58	0
54	MG	1a	1694	1/1	0.95	0.19	62,62,62,62	0
54	MG	1A	3675	1/1	0.95	0.12	35,35,35,35	0
54	MG	1B	224	1/1	0.95	0.17	74,74,74,74	0
54	MG	1A	3003	1/1	0.95	0.17	36,36,36,36	0
54	MG	2A	3418	1/1	0.95	0.07	57,57,57,57	0
54	MG	1A	3336	1/1	0.95	0.28	38,38,38,38	0
54	MG	1A	3820	1/1	0.95	0.26	36,36,36,36	0
54	MG	1A	3337	1/1	0.95	0.12	34,34,34,34	0
54	MG	2A	3028	1/1	0.95	0.09	56,56,56,56	0
54	MG	2A	3576	1/1	0.95	0.13	41,41,41,41	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	1A	3744	1/1	0.95	0.11	58,58,58,58	0
54	MG	1D	302	1/1	0.95	0.19	57,57,57,57	0
54	MG	1A	3212	1/1	0.95	0.40	46,46,46,46	0
54	MG	1A	3570	1/1	0.95	0.15	30,30,30,30	0
54	MG	1a	1705	1/1	0.95	0.31	62,62,62,62	0
54	MG	2A	3582	1/1	0.95	0.14	56,56,56,56	0
54	MG	2D	306	1/1	0.95	0.29	48,48,48,48	0
54	MG	1A	3050	1/1	0.95	0.30	39,39,39,39	0
54	MG	1a	1822	1/1	0.95	0.12	61,61,61,61	0
54	MG	2A	3433	1/1	0.95	0.07	63,63,63,63	0
54	MG	1D	308	1/1	0.95	0.23	39,39,39,39	0
54	MG	2A	3435	1/1	0.95	0.10	58,58,58,58	0
54	MG	1A	3521	1/1	0.95	0.24	30,30,30,30	0
54	MG	2A	3038	1/1	0.95	0.14	58,58,58,58	0
54	MG	2a	3143	1/1	0.95	0.15	73,73,73,73	0
54	MG	2A	3158	1/1	0.95	0.10	76,76,76,76	0
54	MG	2E	304	1/1	0.95	0.08	62,62,62,62	0
54	MG	1a	1608	1/1	0.95	0.14	63,63,63,63	0
54	MG	2a	3147	1/1	0.95	0.11	81,81,81,81	0
54	MG	1A	3749	1/1	0.95	0.22	59,59,59,59	0
54	MG	1A	3625	1/1	0.95	0.15	48,48,48,48	0
54	MG	2A	3164	1/1	0.95	0.10	88,88,88,88	0
54	MG	2A	3289	1/1	0.95	0.23	68,68,68,68	0
54	MG	2a	3152	1/1	0.95	0.12	66,66,66,66	0
54	MG	1A	3832	1/1	0.95	0.17	53,53,53,53	0
54	MG	1A	3309	1/1	0.95	0.26	41,41,41,41	0
54	MG	2a	3157	1/1	0.95	0.16	75,75,75,75	0
54	MG	2A	3604	1/1	0.95	0.19	51,51,51,51	0
54	MG	1A	3834	1/1	0.95	0.07	43,43,43,43	0
54	MG	2A	3606	1/1	0.95	0.15	66,66,66,66	0
54	MG	2T	202	1/1	0.95	0.22	72,72,72,72	0
54	MG	1D	317	1/1	0.95	0.09	76,76,76,76	0
54	MG	1A	3997	1/1	0.95	0.12	32,32,32,32	0
54	MG	1a	1717	1/1	0.95	0.19	71,71,71,71	0
54	MG	1a	1619	1/1	0.95	0.09	70,70,70,70	0
54	MG	1A	3085	1/1	0.95	0.54	40,40,40,40	0
54	MG	2X	101	1/1	0.95	0.11	67,67,67,67	0
54	MG	1E	303	1/1	0.95	0.32	57,57,57,57	0
54	MG	1A	3479	1/1	0.95	0.08	58,58,58,58	0
54	MG	1A	3194	1/1	0.95	0.29	44,44,44,44	0
54	MG	23	101	1/1	0.95	0.26	62,62,62,62	0
54	MG	2A	3615	1/1	0.95	0.12	29,29,29,29	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	1A	3526	1/1	0.95	0.11	60,60,60,60	0
54	MG	2A	3617	1/1	0.95	0.07	69,69,69,69	0
54	MG	2A	3303	1/1	0.95	0.17	29,29,29,29	0
54	MG	2a	3182	1/1	0.95	0.06	68,68,68,68	0
54	MG	1a	1727	1/1	0.95	0.07	64,64,64,64	0
54	MG	2A	3305	1/1	0.95	0.18	45,45,45,45	0
54	MG	1A	3840	1/1	0.95	0.20	39,39,39,39	0
54	MG	1A	3841	1/1	0.95	0.35	42,42,42,42	0
54	MG	2A	3311	1/1	0.95	0.15	72,72,72,72	0
54	MG	1F	306	1/1	0.95	0.23	42,42,42,42	0
54	MG	2A	3627	1/1	0.95	0.18	72,72,72,72	0
54	MG	1A	3842	1/1	0.95	0.13	70,70,70,70	0
54	MG	1a	1733	1/1	0.95	0.28	72,72,72,72	0
54	MG	1F	308	1/1	0.95	0.26	36,36,36,36	0
54	MG	1A	3634	1/1	0.95	0.31	40,40,40,40	0
54	MG	1F	311	1/1	0.95	0.20	61,61,61,61	0
54	MG	2a	3011	1/1	0.95	0.17	74,74,74,74	0
54	MG	1A	3924	1/1	0.95	0.26	35,35,35,35	0
54	MG	2A	3472	1/1	0.95	0.11	56,56,56,56	0
54	MG	2a	3014	1/1	0.95	0.23	63,63,63,63	0
55	HGR	2A	3731	36/36	0.95	0.25	36,44,52,57	0
54	MG	1A	3434	1/1	0.95	0.16	46,46,46,46	0
54	MG	1A	3015	1/1	0.95	0.30	32,32,32,32	0
54	MG	1A	3846	1/1	0.95	0.13	25,25,25,25	0
54	MG	1A	3929	1/1	0.95	0.23	27,27,27,27	0
54	MG	2A	3324	1/1	0.95	0.15	47,47,47,47	0
54	MG	1a	1859	1/1	0.95	0.18	60,60,60,60	0
54	MG	1a	1742	1/1	0.95	0.19	44,44,44,44	0
54	MG	2A	3642	1/1	0.95	0.07	62,62,62,62	0
54	MG	1A	3347	1/1	0.95	0.20	42,42,42,42	0
54	MG	1A	3764	1/1	0.95	0.17	50,50,50,50	0
54	MG	1A	3765	1/1	0.95	0.28	50,50,50,50	0
54	MG	1A	3118	1/1	0.95	0.23	46,46,46,46	0
54	MG	2A	3334	1/1	0.95	0.09	58,58,58,58	0
54	MG	2a	3028	1/1	0.95	0.16	66,66,66,66	0
54	MG	1A	3493	1/1	0.96	0.16	44,44,44,44	0
54	MG	2A	3186	1/1	0.96	0.22	70,70,70,70	0
54	MG	1A	3111	1/1	0.96	0.32	49,49,49,49	0
54	MG	1A	3339	1/1	0.96	0.18	62,62,62,62	0
54	MG	1A	3771	1/1	0.96	0.08	32,32,32,32	0
54	MG	2A	3664	1/1	0.96	0.14	35,35,35,35	0
54	MG	1A	3955	1/1	0.96	0.13	62,62,62,62	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	1A	3159	1/1	0.96	0.39	49,49,49,49	0
54	MG	1A	3497	1/1	0.96	0.21	55,55,55,55	0
54	MG	1A	3442	1/1	0.96	0.27	35,35,35,35	0
54	MG	15	108	1/1	0.96	0.08	56,56,56,56	0
54	MG	1a	1832	1/1	0.96	0.15	76,76,76,76	0
54	MG	2A	3196	1/1	0.96	0.20	61,61,61,61	0
54	MG	1A	3244	1/1	0.96	0.49	45,45,45,45	0
54	MG	1A	3559	1/1	0.96	0.13	57,57,57,57	0
54	MG	17	103	1/1	0.96	0.36	41,41,41,41	0
54	MG	17	104	1/1	0.96	0.55	43,43,43,43	0
54	MG	1A	3961	1/1	0.96	0.21	48,48,48,48	0
54	MG	1A	3245	1/1	0.96	0.22	36,36,36,36	0
54	MG	1A	3392	1/1	0.96	0.24	39,39,39,39	0
54	MG	2A	3680	1/1	0.96	0.12	81,81,81,81	0
54	MG	2A	3681	1/1	0.96	0.05	76,76,76,76	0
54	MG	1A	3446	1/1	0.96	0.25	34,34,34,34	0
54	MG	19	101	1/1	0.96	0.24	65,65,65,65	0
54	MG	1A	3393	1/1	0.96	0.15	30,30,30,30	0
54	MG	2A	3070	1/1	0.96	0.59	49,49,49,49	0
54	MG	2A	3686	1/1	0.96	0.15	41,41,41,41	0
54	MG	2A	3354	1/1	0.96	0.15	40,40,40,40	0
54	MG	1A	3279	1/1	0.96	0.63	55,55,55,55	0
54	MG	1A	3630	1/1	0.96	0.13	70,70,70,70	0
54	MG	1B	227	1/1	0.96	0.18	76,76,76,76	0
54	MG	2A	3359	1/1	0.96	0.10	62,62,62,62	0
54	MG	1A	3631	1/1	0.96	0.28	64,64,64,64	0
54	MG	1A	3790	1/1	0.96	0.22	73,73,73,73	0
54	MG	1A	3077	1/1	0.96	0.41	45,45,45,45	0
54	MG	1A	3633	1/1	0.96	0.43	37,37,37,37	0
54	MG	2A	3365	1/1	0.96	0.15	46,46,46,46	0
54	MG	1A	3793	1/1	0.96	0.13	45,45,45,45	0
54	MG	1a	1724	1/1	0.96	0.13	43,43,43,43	0
54	MG	1a	1725	1/1	0.96	0.26	53,53,53,53	0
54	MG	1A	3078	1/1	0.96	0.37	37,37,37,37	0
54	MG	1A	3569	1/1	0.96	0.19	54,54,54,54	0
54	MG	1A	3881	1/1	0.96	0.18	48,48,48,48	0
54	MG	1A	3397	1/1	0.96	0.20	51,51,51,51	0
54	MG	1a	1731	1/1	0.96	0.15	61,61,61,61	0
54	MG	1A	3978	1/1	0.96	0.08	56,56,56,56	0
54	MG	1A	3348	1/1	0.96	0.25	46,46,46,46	0
54	MG	2A	3377	1/1	0.96	0.11	46,46,46,46	0
54	MG	2A	3088	1/1	0.96	0.18	47,47,47,47	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	1a	1615	1/1	0.96	0.15	76,76,76,76	0
54	MG	2A	3381	1/1	0.96	0.13	45,45,45,45	0
54	MG	1a	1616	1/1	0.96	0.12	76,76,76,76	0
54	MG	1A	3638	1/1	0.96	0.17	45,45,45,45	0
54	MG	1a	1618	1/1	0.96	0.13	53,53,53,53	0
54	MG	1D	314	1/1	0.96	0.59	49,49,49,49	0
54	MG	1A	3710	1/1	0.96	0.10	51,51,51,51	0
54	MG	1A	3017	1/1	0.96	0.19	36,36,36,36	0
54	MG	1A	3984	1/1	0.96	0.18	46,46,46,46	0
54	MG	1A	3573	1/1	0.96	0.20	57,57,57,57	0
54	MG	1a	1743	1/1	0.96	0.15	72,72,72,72	0
54	MG	2a	3094	1/1	0.96	0.23	59,59,59,59	0
54	MG	1A	3715	1/1	0.96	0.21	46,46,46,46	0
54	MG	2A	3393	1/1	0.96	0.15	71,71,71,71	0
54	MG	2A	3237	1/1	0.96	0.82	44,44,44,44	0
54	MG	2A	3395	1/1	0.96	0.07	74,74,74,74	0
54	MG	1A	3221	1/1	0.96	0.60	44,44,44,44	0
54	MG	2A	3239	1/1	0.96	0.10	65,65,65,65	0
54	MG	1A	3717	1/1	0.96	0.14	51,51,51,51	0
54	MG	2a	3104	1/1	0.96	0.28	71,71,71,71	0
54	MG	1A	3575	1/1	0.96	0.33	40,40,40,40	0
54	MG	1A	3252	1/1	0.96	0.20	32,32,32,32	0
54	MG	1F	301	1/1	0.96	0.14	40,40,40,40	0
54	MG	1a	1751	1/1	0.96	0.09	76,76,76,76	0
54	MG	1a	1631	1/1	0.96	0.31	71,71,71,71	0
54	MG	1A	3459	1/1	0.96	0.21	62,62,62,62	0
54	MG	1A	3166	1/1	0.96	0.38	41,41,41,41	0
54	MG	2A	3569	1/1	0.96	0.10	73,73,73,73	0
54	MG	1A	3900	1/1	0.96	0.17	50,50,50,50	0
54	MG	1A	3517	1/1	0.96	0.17	32,32,32,32	0
54	MG	2A	3408	1/1	0.96	0.19	57,57,57,57	0
54	MG	1A	3812	1/1	0.96	0.22	38,38,38,38	0
54	MG	1A	3068	1/1	0.96	0.31	51,51,51,51	0
54	MG	1A	3147	1/1	0.96	0.14	37,37,37,37	0
54	MG	1A	3356	1/1	0.96	0.14	28,28,28,28	0
54	MG	2a	3122	1/1	0.96	0.12	67,67,67,67	0
54	MG	1A	4000	1/1	0.96	0.19	50,50,50,50	0
54	MG	1A	3288	1/1	0.96	0.25	37,37,37,37	0
54	MG	1A	3585	1/1	0.96	0.13	51,51,51,51	0
54	MG	2A	3259	1/1	0.96	0.12	70,70,70,70	0
54	MG	1A	3408	1/1	0.96	0.18	39,39,39,39	0
54	MG	2A	3119	1/1	0.96	0.23	57,57,57,57	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	1A	3226	1/1	0.96	0.15	62,62,62,62	0
54	MG	1A	3910	1/1	0.96	0.41	39,39,39,39	0
54	MG	1A	3361	1/1	0.96	0.30	43,43,43,43	0
54	MG	2a	3133	1/1	0.96	0.12	64,64,64,64	0
54	MG	2A	3590	1/1	0.96	0.17	58,58,58,58	0
54	MG	2A	3424	1/1	0.96	0.06	47,47,47,47	0
54	MG	2A	3425	1/1	0.96	0.47	65,65,65,65	0
54	MG	1A	3822	1/1	0.96	0.21	56,56,56,56	0
54	MG	1A	3823	1/1	0.96	0.37	46,46,46,46	0
54	MG	1A	3914	1/1	0.96	0.21	44,44,44,44	0
54	MG	2E	305	1/1	0.96	0.15	43,43,43,43	0
54	MG	1A	3824	1/1	0.96	0.13	74,74,74,74	0
54	MG	2F	301	1/1	0.96	0.54	48,48,48,48	0
54	MG	1N	204	1/1	0.96	0.25	60,60,60,60	0
54	MG	2F	304	1/1	0.96	0.69	52,52,52,52	0
54	MG	1o	101	1/1	0.96	0.22	53,53,53,53	0
54	MG	1A	3323	1/1	0.96	0.46	46,46,46,46	0
54	MG	1a	1654	1/1	0.96	0.20	66,66,66,66	0
54	MG	1A	3734	1/1	0.96	0.16	51,51,51,51	0
54	MG	1P	202	1/1	0.96	0.20	36,36,36,36	0
54	MG	1A	3363	1/1	0.96	0.23	30,30,30,30	0
54	MG	2R	201	1/1	0.96	0.41	55,55,55,55	0
54	MG	1A	3148	1/1	0.96	0.28	38,38,38,38	0
54	MG	1A	3001	1/1	0.96	0.12	39,39,39,39	0
54	MG	2A	3278	1/1	0.96	0.20	53,53,53,53	0
54	MG	1Q	201	1/1	0.96	0.16	40,40,40,40	0
54	MG	1A	3028	1/1	0.96	0.35	41,41,41,41	0
54	MG	2a	3160	1/1	0.96	0.22	79,79,79,79	0
54	MG	2a	3161	1/1	0.96	0.27	78,78,78,78	0
54	MG	2V	201	1/1	0.96	0.58	59,59,59,59	0
54	MG	1A	3594	1/1	0.96	0.23	55,55,55,55	0
54	MG	1A	3740	1/1	0.96	0.50	43,43,43,43	0
54	MG	1A	3595	1/1	0.96	0.21	48,48,48,48	0
54	MG	1A	3106	1/1	0.96	0.34	37,37,37,37	0
54	MG	2Y	201	1/1	0.96	0.30	59,59,59,59	0
54	MG	2A	3145	1/1	0.96	0.27	44,44,44,44	0
54	MG	2a	3170	1/1	0.96	0.14	68,68,68,68	0
54	MG	1A	3743	1/1	0.96	0.19	35,35,35,35	0
54	MG	1A	3029	1/1	0.96	0.20	48,48,48,48	0
54	MG	1T	202	1/1	0.96	0.20	68,68,68,68	0
54	MG	25	101	1/1	0.96	1.12	57,57,57,57	0
54	MG	2A	3149	1/1	0.96	0.19	60,60,60,60	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	1A	3928	1/1	0.96	0.14	35,35,35,35	0
54	MG	1A	3233	1/1	0.96	0.45	41,41,41,41	0
54	MG	1T	205	1/1	0.96	0.14	54,54,54,54	0
54	MG	1A	4027	1/1	0.96	0.18	46,46,46,46	0
54	MG	1A	3838	1/1	0.96	0.17	33,33,33,33	0
54	MG	1A	3421	1/1	0.96	0.18	46,46,46,46	0
54	MG	1U	206	1/1	0.96	0.32	44,44,44,44	0
54	MG	2A	3023	1/1	0.96	0.23	74,74,74,74	0
54	MG	1A	3535	1/1	0.96	0.24	28,28,28,28	0
54	MG	1A	4031	1/1	0.96	0.11	60,60,60,60	0
54	MG	1a	1800	1/1	0.96	0.15	58,58,58,58	0
54	MG	2A	3301	1/1	0.96	0.10	38,38,38,38	0
54	MG	2A	3027	1/1	0.96	0.10	41,41,41,41	0
54	MG	1A	3422	1/1	0.96	0.21	23,23,23,23	0
54	MG	1A	3673	1/1	0.96	0.11	62,62,62,62	0
54	MG	1V	206	1/1	0.96	0.13	61,61,61,61	0
54	MG	2A	3306	1/1	0.96	0.13	43,43,43,43	0
54	MG	2k	201	1/1	0.96	0.14	69,69,69,69	0
54	MG	1A	3235	1/1	0.96	0.27	42,42,42,42	0
54	MG	1a	1806	1/1	0.96	0.16	65,65,65,65	0
54	MG	1W	202	1/1	0.96	0.23	61,61,61,61	0
54	MG	1A	3297	1/1	0.96	0.14	71,71,71,71	0
54	MG	1a	1809	1/1	0.96	0.12	76,76,76,76	0
54	MG	1A	3195	1/1	0.96	0.34	45,45,45,45	0
54	MG	2A	3644	1/1	0.96	0.16	49,49,49,49	0
54	MG	1A	3044	1/1	0.96	0.22	40,40,40,40	0
54	MG	1A	3099	1/1	0.96	0.15	59,59,59,59	0
54	MG	1A	3303	1/1	0.96	0.24	39,39,39,39	0
54	MG	1A	3380	1/1	0.96	0.25	30,30,30,30	0
54	MG	10	104	1/1	0.96	0.16	64,64,64,64	0
54	MG	1A	3681	1/1	0.96	0.24	38,38,38,38	0
54	MG	1A	3382	1/1	0.96	0.16	31,31,31,31	0
54	MG	1A	3271	1/1	0.96	0.25	36,36,36,36	0
54	MG	1A	3763	1/1	0.96	0.20	27,27,27,27	0
54	MG	1A	3436	1/1	0.96	0.21	34,34,34,34	0
54	MG	1A	3614	1/1	0.96	0.20	57,57,57,57	0
59	ZN	26	501	1/1	0.96	0.21	75,75,75,75	0
54	MG	1A	3239	1/1	0.96	0.50	41,41,41,41	0
54	MG	2A	3495	1/1	0.96	0.84	57,57,57,57	0
54	MG	1R	204	1/1	0.97	0.18	48,48,48,48	0
54	MG	1A	3898	1/1	0.97	0.21	29,29,29,29	0
54	MG	1A	3317	1/1	0.97	0.18	21,21,21,21	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	1A	3208	1/1	0.97	0.12	55,55,55,55	0
54	MG	1A	3081	1/1	0.97	0.45	44,44,44,44	0
54	MG	1A	3242	1/1	0.97	0.58	44,44,44,44	0
54	MG	1A	3210	1/1	0.97	0.22	50,50,50,50	0
54	MG	2E	301	1/1	0.97	0.81	54,54,54,54	0
54	MG	1A	3182	1/1	0.97	0.20	35,35,35,35	0
54	MG	1A	3365	1/1	0.97	0.17	38,38,38,38	0
54	MG	1U	203	1/1	0.97	0.38	41,41,41,41	0
54	MG	1a	1726	1/1	0.97	0.38	86,86,86,86	0
54	MG	1A	3761	1/1	0.97	0.23	41,41,41,41	0
54	MG	1A	3117	1/1	0.97	0.33	36,36,36,36	0
54	MG	1A	3415	1/1	0.97	0.25	37,37,37,37	0
54	MG	1A	3246	1/1	0.97	0.32	38,38,38,38	0
54	MG	1A	3368	1/1	0.97	0.13	48,48,48,48	0
54	MG	1A	3766	1/1	0.97	0.25	57,57,57,57	0
54	MG	2A	3412	1/1	0.97	0.13	45,45,45,45	0
54	MG	2A	3007	1/1	0.97	0.21	49,49,49,49	0
54	MG	2a	3102	1/1	0.97	0.41	62,62,62,62	0
54	MG	1A	3247	1/1	0.97	0.22	33,33,33,33	0
54	MG	2Q	201	1/1	0.97	0.07	58,58,58,58	0
54	MG	2A	3415	1/1	0.97	0.10	43,43,43,43	0
54	MG	2R	202	1/1	0.97	0.18	48,48,48,48	0
54	MG	1B	223	1/1	0.97	0.10	55,55,55,55	0
54	MG	1A	3082	1/1	0.97	0.31	48,48,48,48	0
54	MG	1A	3186	1/1	0.97	0.24	38,38,38,38	0
54	MG	1A	3989	1/1	0.97	0.24	40,40,40,40	0
54	MG	2a	3111	1/1	0.97	0.40	74,74,74,74	0
54	MG	1A	3641	1/1	0.97	0.14	41,41,41,41	0
54	MG	1A	3642	1/1	0.97	0.15	63,63,63,63	0
54	MG	1A	3584	1/1	0.97	0.17	45,45,45,45	0
54	MG	1A	3372	1/1	0.97	0.09	55,55,55,55	0
54	MG	1A	3023	1/1	0.97	0.38	40,40,40,40	0
54	MG	2A	3315	1/1	0.97	0.08	44,44,44,44	0
54	MG	1A	3007	1/1	0.97	0.20	42,42,42,42	0
54	MG	1A	3137	1/1	0.97	0.30	39,39,39,39	0
54	MG	2A	3663	1/1	0.97	0.14	43,43,43,43	0
54	MG	2A	3021	1/1	0.97	0.12	52,52,52,52	0
54	MG	2a	3123	1/1	0.97	0.13	61,61,61,61	0
54	MG	2A	3429	1/1	0.97	0.06	55,55,55,55	0
54	MG	1A	3427	1/1	0.97	0.17	36,36,36,36	0
54	MG	1A	3534	1/1	0.97	0.23	31,31,31,31	0
54	MG	1A	3711	1/1	0.97	0.12	37,37,37,37	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	1A	3018	1/1	0.97	0.25	31,31,31,31	0
54	MG	2A	3550	1/1	0.97	0.10	65,65,65,65	0
54	MG	1A	3139	1/1	0.97	0.45	33,33,33,33	0
54	MG	1a	1750	1/1	0.97	0.14	76,76,76,76	0
54	MG	2A	3325	1/1	0.97	0.11	36,36,36,36	0
54	MG	1A	3164	1/1	0.97	0.62	41,41,41,41	0
54	MG	1A	4003	1/1	0.97	0.12	28,28,28,28	0
54	MG	1A	3165	1/1	0.97	0.32	42,42,42,42	0
54	MG	2A	3677	1/1	0.97	0.08	74,74,74,74	0
54	MG	2A	3329	1/1	0.97	0.25	45,45,45,45	0
54	MG	1A	3788	1/1	0.97	0.15	49,49,49,49	0
54	MG	15	102	1/1	0.97	0.35	39,39,39,39	0
54	MG	1A	3381	1/1	0.97	0.18	41,41,41,41	0
54	MG	1A	3655	1/1	0.97	0.13	30,30,30,30	0
54	MG	1a	1847	1/1	0.97	0.10	73,73,73,73	0
54	MG	1A	3932	1/1	0.97	0.15	21,21,21,21	0
54	MG	1a	1759	1/1	0.97	0.18	70,70,70,70	0
54	MG	1A	3859	1/1	0.97	0.17	48,48,48,48	0
54	MG	2A	3450	1/1	0.97	0.11	66,66,66,66	0
54	MG	1E	304	1/1	0.97	0.21	34,34,34,34	0
54	MG	2A	3136	1/1	0.97	0.17	72,72,72,72	0
54	MG	1A	3140	1/1	0.97	0.32	36,36,36,36	0
54	MG	1a	1853	1/1	0.97	0.13	67,67,67,67	0
54	MG	2A	3042	1/1	0.97	0.13	40,40,40,40	0
54	MG	1A	3107	1/1	0.97	1.15	42,42,42,42	0
54	MG	1E	307	1/1	0.97	0.24	32,32,32,32	0
54	MG	2a	3154	1/1	0.97	0.06	80,80,80,80	0
54	MG	1A	3142	1/1	0.97	0.24	50,50,50,50	0
54	MG	2a	3156	1/1	0.97	0.17	72,72,72,72	0
54	MG	2A	3242	1/1	0.97	0.18	69,69,69,69	0
54	MG	1A	3795	1/1	0.97	0.19	36,36,36,36	0
54	MG	2a	3159	1/1	0.97	0.13	51,51,51,51	0
54	MG	1A	3438	1/1	0.97	0.20	35,35,35,35	0
54	MG	1A	3660	1/1	0.97	0.21	50,50,50,50	0
54	MG	1A	3095	1/1	0.97	0.20	40,40,40,40	0
54	MG	1A	3042	1/1	0.97	0.17	35,35,35,35	0
54	MG	1A	3263	1/1	0.97	0.18	53,53,53,53	0
54	MG	2A	3583	1/1	0.97	0.55	75,75,75,75	0
54	MG	1A	3547	1/1	0.97	0.17	24,24,24,24	0
54	MG	1A	3097	1/1	0.97	0.29	38,38,38,38	0
54	MG	1A	3043	1/1	0.97	0.21	22,22,22,22	0
54	MG	2A	3710	1/1	0.97	0.06	70,70,70,70	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
54	MG	2A	3588	1/1	0.97	0.10	57,57,57,57	0
54	MG	2A	3589	1/1	0.97	0.16	60,60,60,60	0
54	MG	1F	313	1/1	0.97	0.51	48,48,48,48	0
54	MG	1A	3550	1/1	0.97	0.16	37,37,37,37	0
54	MG	2A	3254	1/1	0.97	0.17	27,27,27,27	0
54	MG	2a	3176	1/1	0.97	0.13	72,72,72,72	0
54	MG	1A	3306	1/1	0.97	0.27	50,50,50,50	0
54	MG	1A	3267	1/1	0.97	0.24	54,54,54,54	0
54	MG	2A	3363	1/1	0.97	0.11	84,84,84,84	0
54	MG	1A	3346	1/1	0.97	0.21	31,31,31,31	0
54	MG	1A	3088	1/1	0.97	0.44	46,46,46,46	0
54	MG	2A	3160	1/1	0.97	0.60	50,50,50,50	0
54	MG	1A	3231	1/1	0.97	0.35	47,47,47,47	0
54	MG	2A	3600	1/1	0.97	0.06	50,50,50,50	0
54	MG	2A	3480	1/1	0.97	0.10	68,68,68,68	0
54	MG	1A	3113	1/1	0.97	0.50	36,36,36,36	0
54	MG	1A	3558	1/1	0.97	0.16	49,49,49,49	0
54	MG	1A	3176	1/1	0.97	0.11	41,41,41,41	0
54	MG	2a	3189	1/1	0.97	0.32	65,65,65,65	0
54	MG	1N	201	1/1	0.97	0.14	46,46,46,46	0
54	MG	1A	3234	1/1	0.97	0.36	39,39,39,39	0
54	MG	1A	3618	1/1	0.97	0.22	44,44,44,44	0
54	MG	1A	3816	1/1	0.97	0.23	69,69,69,69	0
54	MG	2A	3488	1/1	0.97	0.17	68,68,68,68	0
54	MG	1d	301	1/1	0.97	0.20	74,74,74,74	0
54	MG	1A	3114	1/1	0.97	0.49	42,42,42,42	0
54	MG	1A	3151	1/1	0.97	0.59	41,41,41,41	0
54	MG	1A	3509	1/1	0.97	0.23	37,37,37,37	0
54	MG	1A	3564	1/1	0.97	0.15	29,29,29,29	0
54	MG	1A	3683	1/1	0.97	0.25	33,33,33,33	0
55	HGR	1A	4041	36/36	0.97	0.23	21,29,35,39	0
54	MG	1A	3964	1/1	0.97	0.15	24,24,24,24	0
56	ERY	1A	4042	51/51	0.97	0.24	20,37,45,53	0
56	ERY	2A	3732	51/51	0.97	0.31	38,48,57,63	0
54	MG	2B	210	1/1	0.97	0.17	77,77,77,77	0
54	MG	1A	3891	1/1	0.97	0.16	30,30,30,30	0
57	MPD	18	103	8/8	0.97	0.30	36,41,45,49	0
54	MG	1a	1796	1/1	0.97	0.11	65,65,65,65	0
54	MG	1A	3354	1/1	0.97	0.20	26,26,26,26	0
54	MG	1A	3072	1/1	0.97	0.44	39,39,39,39	0
54	MG	2B	215	1/1	0.97	0.23	77,77,77,77	0
54	MG	2A	3621	1/1	0.97	0.14	68,68,68,68	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	1A	3180	1/1	0.97	0.26	34,34,34,34	0
54	MG	1g	203	1/1	0.97	0.14	65,65,65,65	0
59	ZN	15	109	1/1	0.97	0.22	46,46,46,46	0
54	MG	1R	201	1/1	0.97	0.18	44,44,44,44	0
54	MG	1a	1801	1/1	0.97	0.06	76,76,76,76	0
54	MG	2D	303	1/1	0.97	0.93	50,50,50,50	0
54	MG	2A	3392	1/1	0.97	0.16	54,54,54,54	0
54	MG	1A	3896	1/1	0.97	0.19	44,44,44,44	0
54	MG	1A	3357	1/1	0.97	0.21	30,30,30,30	0
54	MG	2A	3704	1/1	0.98	0.15	65,65,65,65	0
54	MG	1A	3258	1/1	0.98	0.52	47,47,47,47	0
54	MG	1A	3098	1/1	0.98	0.24	22,22,22,22	0
54	MG	1A	3475	1/1	0.98	0.17	34,34,34,34	0
54	MG	1V	201	1/1	0.98	0.41	35,35,35,35	0
54	MG	2A	3709	1/1	0.98	0.12	65,65,65,65	0
54	MG	1A	3476	1/1	0.98	0.18	35,35,35,35	0
54	MG	1A	3417	1/1	0.98	0.22	31,31,31,31	0
54	MG	1F	303	1/1	0.98	0.29	38,38,38,38	0
54	MG	1A	3772	1/1	0.98	0.26	39,39,39,39	0
54	MG	1A	3731	1/1	0.98	0.06	50,50,50,50	0
54	MG	1A	3512	1/1	0.98	0.20	28,28,28,28	0
54	MG	2A	3020	1/1	0.98	0.29	50,50,50,50	0
54	MG	1A	3862	1/1	0.98	0.19	27,27,27,27	0
54	MG	2A	3489	1/1	0.98	0.15	72,72,72,72	0
54	MG	1A	3013	1/1	0.98	0.16	23,23,23,23	0
54	MG	1A	3074	1/1	0.98	0.15	32,32,32,32	0
54	MG	2A	3492	1/1	0.98	0.15	42,42,42,42	0
54	MG	2A	3493	1/1	0.98	0.09	57,57,57,57	0
54	MG	1F	310	1/1	0.98	0.18	45,45,45,45	0
54	MG	1A	3777	1/1	0.98	0.18	50,50,50,50	0
54	MG	1A	3163	1/1	0.98	0.26	39,39,39,39	0
54	MG	1B	213	1/1	0.98	0.22	52,52,52,52	0
54	MG	2a	3163	1/1	0.98	0.21	65,65,65,65	0
54	MG	1A	3779	1/1	0.98	0.18	49,49,49,49	0
54	MG	1A	3481	1/1	0.98	0.12	60,60,60,60	0
54	MG	2a	3084	1/1	0.98	0.41	72,72,72,72	0
54	MG	1A	3046	1/1	0.98	0.19	14,14,14,14	0
54	MG	2A	3159	1/1	0.98	0.48	55,55,55,55	0
54	MG	2A	3358	1/1	0.98	0.14	39,39,39,39	0
54	MG	1A	3450	1/1	0.98	0.27	27,27,27,27	0
54	MG	1F	318	1/1	0.98	0.14	55,55,55,55	0
54	MG	1A	3264	1/1	0.98	0.39	36,36,36,36	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	1A	3452	1/1	0.98	0.19	32,32,32,32	0
54	MG	1A	3398	1/1	0.98	0.16	30,30,30,30	0
54	MG	1G	204	1/1	0.98	0.18	51,51,51,51	0
54	MG	13	101	1/1	0.98	0.14	43,43,43,43	0
54	MG	1A	3454	1/1	0.98	0.15	39,39,39,39	0
54	MG	13	103	1/1	0.98	0.26	45,45,45,45	0
54	MG	1A	3021	1/1	0.98	0.36	45,45,45,45	0
54	MG	1A	3016	1/1	0.98	0.35	41,41,41,41	0
54	MG	1A	3019	1/1	0.98	0.51	34,34,34,34	0
54	MG	15	104	1/1	0.98	0.14	43,43,43,43	0
54	MG	2a	3101	1/1	0.98	0.39	61,61,61,61	0
54	MG	2A	3372	1/1	0.98	0.16	35,35,35,35	0
54	MG	1A	3123	1/1	0.98	0.19	22,22,22,22	0
54	MG	1A	3378	1/1	0.98	0.20	28,28,28,28	0
54	MG	1a	1649	1/1	0.98	0.19	53,53,53,53	0
54	MG	1A	3460	1/1	0.98	0.27	62,62,62,62	0
54	MG	2A	3447	1/1	0.98	0.14	47,47,47,47	0
54	MG	2A	3307	1/1	0.98	0.12	62,62,62,62	0
54	MG	1A	3184	1/1	0.98	1.01	46,46,46,46	0
54	MG	1A	3603	1/1	0.98	0.20	36,36,36,36	0
54	MG	2A	3310	1/1	0.98	0.17	50,50,50,50	0
54	MG	1A	3752	1/1	0.98	0.16	35,35,35,35	0
54	MG	2A	3453	1/1	0.98	0.07	59,59,59,59	0
54	MG	1A	3884	1/1	0.98	0.22	36,36,36,36	0
54	MG	1A	3056	1/1	0.98	0.20	39,39,39,39	0
54	MG	1a	1836	1/1	0.98	0.19	67,67,67,67	0
54	MG	1D	304	1/1	0.98	0.13	45,45,45,45	0
54	MG	1A	3714	1/1	0.98	0.18	67,67,67,67	0
54	MG	1A	3156	1/1	0.98	0.36	38,38,38,38	0
54	MG	2a	3120	1/1	0.98	0.12	70,70,70,70	0
54	MG	2E	302	1/1	0.98	0.12	53,53,53,53	0
54	MG	1Q	204	1/1	0.98	0.36	47,47,47,47	0
54	MG	1A	3157	1/1	0.98	0.21	46,46,46,46	0
54	MG	1A	3934	1/1	0.98	0.33	48,48,48,48	0
54	MG	1A	3435	1/1	0.98	0.39	60,60,60,60	0
54	MG	1A	3145	1/1	0.98	0.21	27,27,27,27	0
54	MG	1A	3983	1/1	0.98	0.18	51,51,51,51	0
54	MG	1A	3500	1/1	0.98	0.22	51,51,51,51	0
54	MG	1A	3173	1/1	0.98	0.45	46,46,46,46	0
54	MG	1A	3275	1/1	0.98	0.28	41,41,41,41	0
54	MG	1A	3894	1/1	0.98	0.21	36,36,36,36	0
59	ZN	1Y	202	1/1	0.98	0.26	61,61,61,61	0

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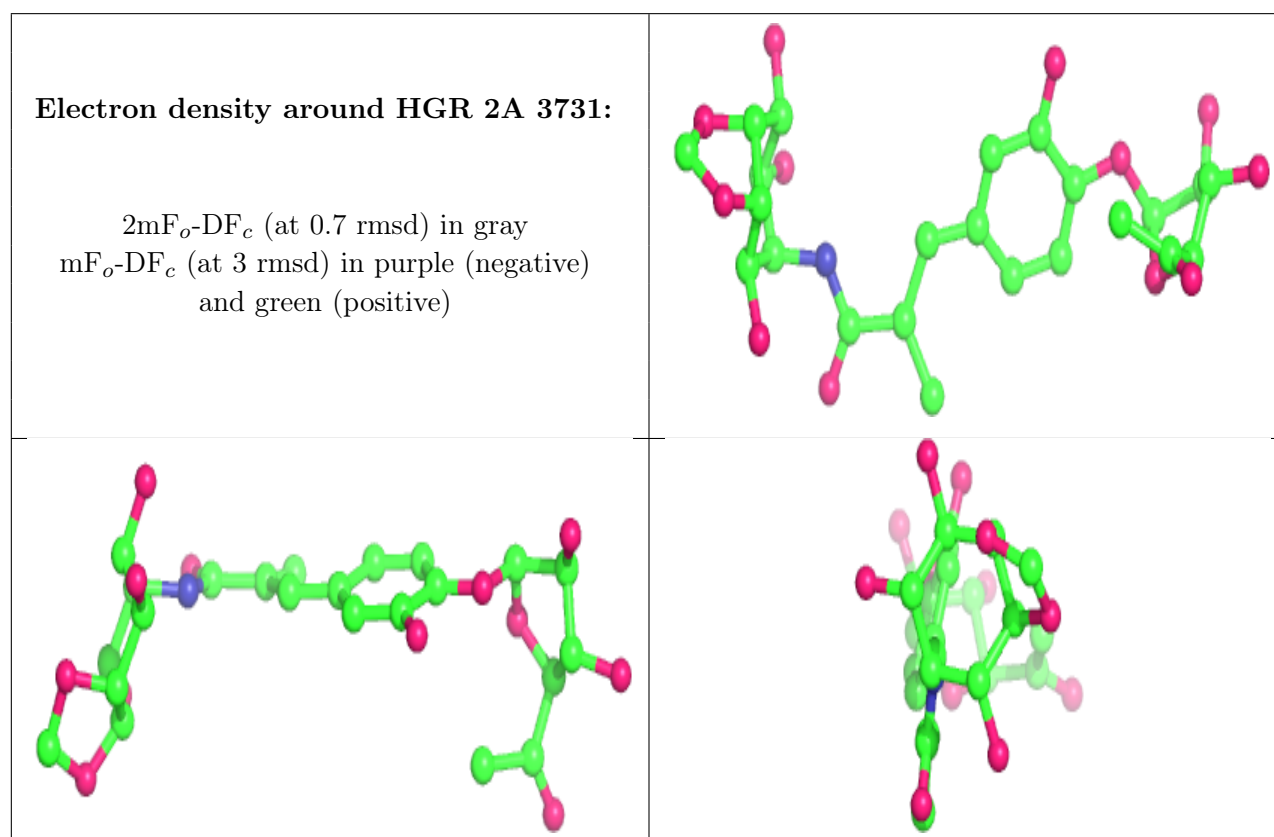
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	1A	3276	1/1	0.98	0.27	33,33,33,33	0
54	MG	1A	3024	1/1	0.98	0.20	28,28,28,28	0
59	ZN	16	501	1/1	0.98	0.27	49,49,49,49	0
59	ZN	1n	103	1/1	0.98	0.17	79,79,79,79	0
54	MG	2A	3698	1/1	0.98	0.14	75,75,75,75	0
54	MG	1E	302	1/1	0.98	0.29	35,35,35,35	0
54	MG	1A	3389	1/1	0.98	0.17	22,22,22,22	0
54	MG	1A	3240	1/1	0.98	0.26	33,33,33,33	0
54	MG	1a	1855	1/1	0.98	0.18	39,39,39,39	0
54	MG	2A	3137	1/1	0.98	0.12	72,72,72,72	0
60	SF4	1d	306	8/8	0.98	0.17	68,77,83,90	0
60	SF4	2d	501	8/8	0.98	0.15	74,89,98,98	0
54	MG	1A	3733	1/1	0.99	0.26	53,53,53,53	0
54	MG	1A	3551	1/1	0.99	0.38	37,37,37,37	0
54	MG	1A	3800	1/1	0.99	0.13	42,42,42,42	0
54	MG	1A	3782	1/1	0.99	0.21	36,36,36,36	0
54	MG	1A	3224	1/1	0.99	0.27	29,29,29,29	0
54	MG	1A	3342	1/1	0.99	0.19	29,29,29,29	0
54	MG	1a	1621	1/1	0.99	0.13	55,55,55,55	0
54	MG	2A	3587	1/1	0.99	0.19	61,61,61,61	0
54	MG	1A	3423	1/1	0.99	0.27	29,29,29,29	0
54	MG	1A	3602	1/1	0.99	0.24	24,24,24,24	0
54	MG	1F	302	1/1	0.99	0.21	39,39,39,39	0
54	MG	1D	306	1/1	0.99	0.18	20,20,20,20	0
54	MG	1A	3069	1/1	0.99	0.23	42,42,42,42	0
54	MG	2A	3626	1/1	0.99	0.14	82,82,82,82	0
54	MG	1A	4016	1/1	0.99	0.23	19,19,19,19	0
54	MG	1A	3755	1/1	0.99	0.17	37,37,37,37	0
54	MG	2A	3562	1/1	0.99	0.14	30,30,30,30	0
54	MG	2A	3380	1/1	0.99	0.17	40,40,40,40	0
54	MG	1A	3789	1/1	0.99	0.14	36,36,36,36	0
54	MG	1U	205	1/1	0.99	0.60	35,35,35,35	0
54	MG	1A	3298	1/1	0.99	0.20	31,31,31,31	0
54	MG	2F	303	1/1	0.99	0.24	66,66,66,66	0
54	MG	1D	312	1/1	0.99	0.25	37,37,37,37	0
54	MG	1A	3568	1/1	0.99	0.14	35,35,35,35	0
54	MG	1V	202	1/1	0.99	0.26	38,38,38,38	0
54	MG	1A	3299	1/1	0.99	0.21	22,22,22,22	0
59	ZN	19	103	1/1	0.99	0.25	45,45,45,45	0
54	MG	15	101	1/1	0.99	0.15	45,45,45,45	0
54	MG	2A	3330	1/1	0.99	0.07	63,63,63,63	0
54	MG	1A	3672	1/1	0.99	0.16	47,47,47,47	0

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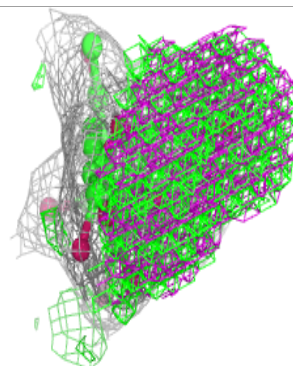
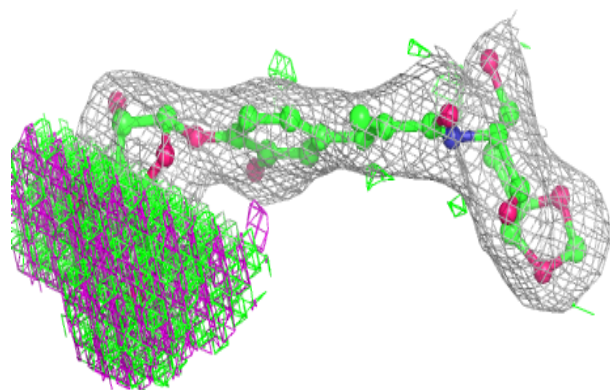
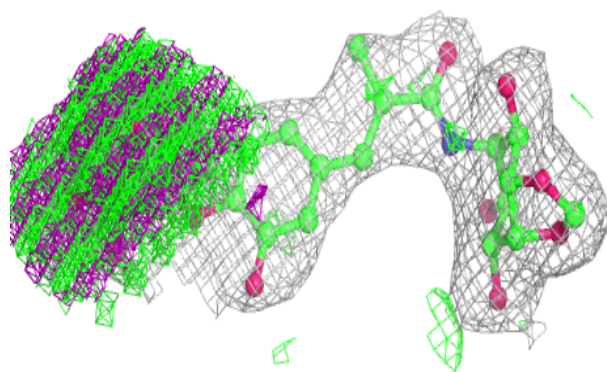
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	MG	2A	3135	1/1	0.99	0.18	38,38,38,38	0
54	MG	1A	3386	1/1	0.99	0.16	19,19,19,19	0
54	MG	1A	3428	1/1	0.99	0.23	28,28,28,28	0
54	MG	1A	3075	1/1	0.99	0.16	39,39,39,39	0
54	MG	1A	3359	1/1	0.99	0.19	15,15,15,15	0
54	MG	2A	3516	1/1	0.99	0.12	68,68,68,68	0

The following is a graphical depiction of the model fit to experimental electron density of all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the geometry validation Tables will also be included. Each fit is shown from different orientation to approximate a three-dimensional view.

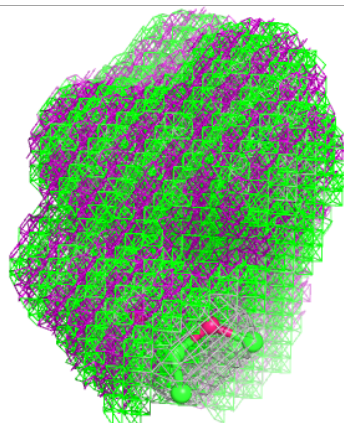
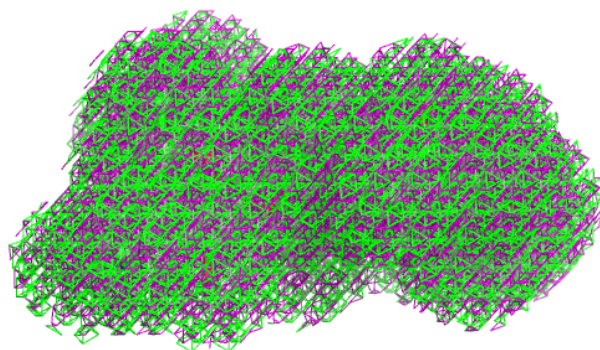
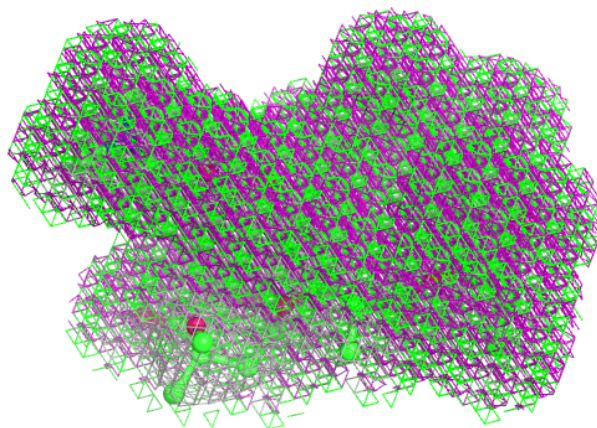


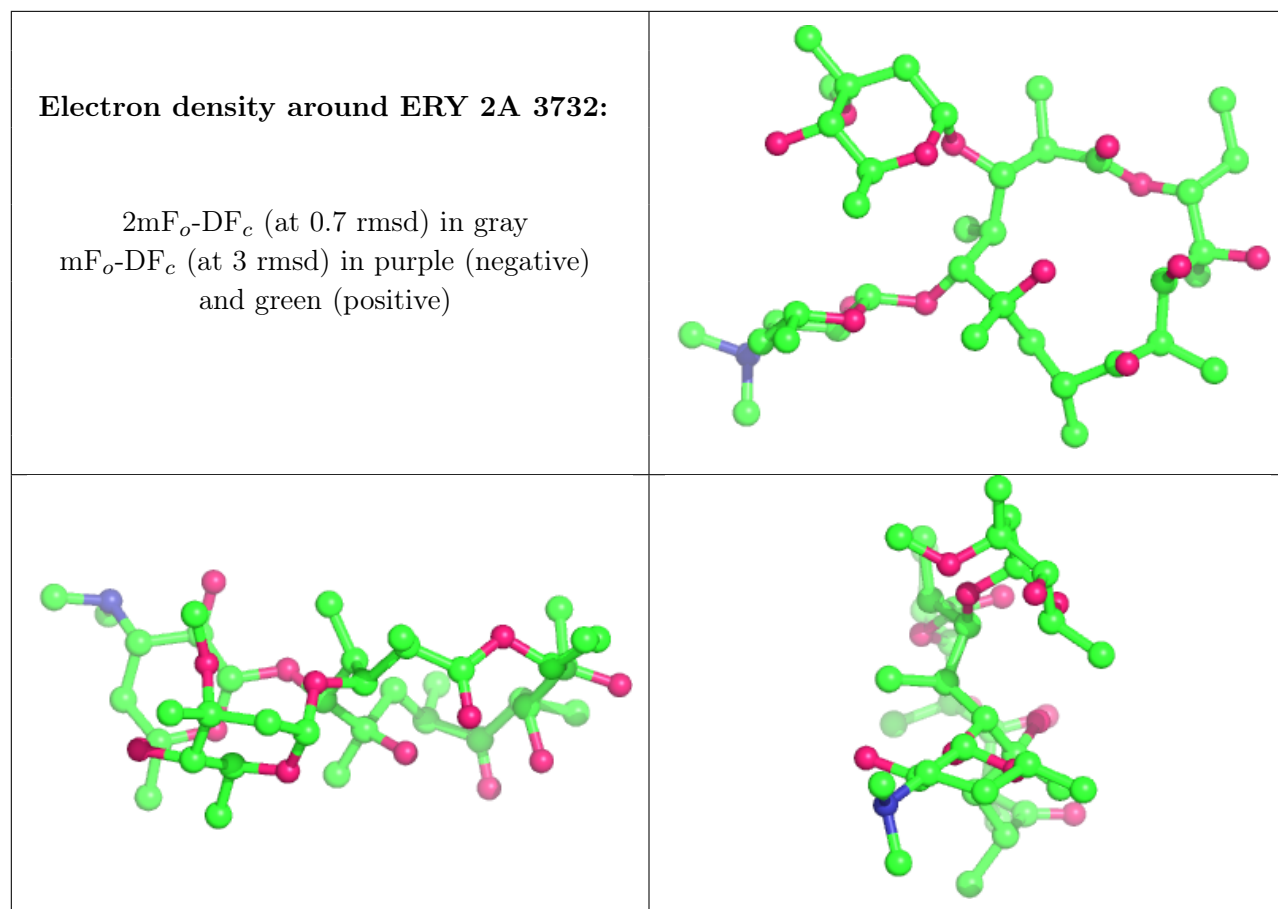
Electron density around HGR 1A 4041:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

**Electron density around ERY 1A 4042:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)





6.5 Other polymers [i](#)

There are no such residues in this entry.